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# Job satisfaction, role strain, burnout, and self-care among American Sign Language/English interpreters

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**Job Satisfaction, Role Strain, Burnout, and Self-Care  
Among American Sign Language/English Interpreters**

By

Carrie N. H. Humphrey

A thesis submitted to Western Oregon University

In partial fulfillment of the requirements for the degree of:  
Master of Arts in Interpreting Studies  
December 2015  
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**WE, THE UNDERSIGNED MEMBERS OF THE GRADUATE FACULTY OF  
WESTERN OREGON UNIVERSITY HAVE EXAMINED THE ENCLOSED**

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- ☒ Thesis
- ☐ Field Study
- ☐ Professional Project

Titled:

Job Satisfaction, Role Strain, Burnout, and Self-Care Among American Sign Language/English Interpreters

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*and hereby certify that in our opinion it is worthy of acceptance as partial fulfillment  
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## ABSTRACT

This study is an analysis of various factors relating to job satisfaction, role strain, physical injury and/or mental/emotional hardship, and burnout in the American Sign Language (ASL)/English interpreting profession in the United States. It includes 81 responses by interpreters using an online survey that collected data on individual interpreter background and demographics, role strain components, burnout, self-care, and job satisfaction. The responses were analyzed through a multiple linear regression focusing on job satisfaction as the dependent variable. They were also analyzed in a bivariate correlation to identify potential relationships among the 60 variables. The results of this study show a high level of job satisfaction despite frequent injuries and hardships, and high demands and/or controls within specific settings of the ASL/English interpreting profession. The results also contain many correlations among the variables of the categories of job satisfaction, background, burnout, and self-care. These correlations may aid novice and experienced interpreters in forming a map by which they can guide their professional practice to maximize their job satisfaction, reduce injury, and minimize potential burnout. The background information collected by this survey provides information that can be used to educate the general population about ASL/English interpreters as well as educate interpreting students in their preparation for the profession.

## CHAPTER 1: INTRODUCTION

This research stems from my personal interest and individual experiences within the profession of American Sign Language (ASL)/English interpreting. During my time as an interpreting student and subsequently as a professional, I have taken note of the varied paths that lead one to become an ASL/English interpreter. The field of ASL/English interpreting also has an array of venues in which to work, allowing individuals to create their own niche within the profession. This leads me to conclude, based on my personal interactions, that ASL/English interpreters are a widely varied group of individuals with the potential for unique experiences within the profession. I have altered my mental image of what it means to be an ASL/English interpreter several times as I continue to learn more about my peers. I am curious how this dynamic group functions as a whole in a profession that is mentally, emotionally, and physically rigorous. Questions arise that are as diverse as those of us who have chosen this for our life's work. What does being an ASL/English interpreter in the United States of America encompass? In what areas does one work? How do interpreters learn ASL? How do interpreters feel about their job satisfaction? What factors influence their job satisfaction and burn out? What kind of self-care do interpreters practice, and is there a correlation with injury prevention? Do interpreters feel capable of managing the various work demands and role strain that this job entails? With all of these questions in mind, I conducted a survey related to ASL/English interpreter background characteristics, self-care, role strain, job satisfaction, and burnout (see Appendix A). The main research

question I strove to answer was: What aspects of an ASL/English interpreter's practice have the biggest impact on job satisfaction?

This survey builds on concepts of a similar study conducted by Piko (2006) within the healthcare profession. Piko identified interrelationships among burnout, role strain, and job satisfaction, as well as psychosomatic health and psychosocial work environment (p. 311). Relating similar factors to interpreting, Schwenke (2012) found interrelationships among perfectionism, perceived stress, control resources, and burnout (p. 60). Both studies identified different factors that can impact burnout. Their findings piqued my curiosity in several aspects that may affect burnout for ASL/English interpreters, and I began to wonder whether it is possible to adjust one's work style and patterns to mitigate potential burnout.

A third study that influences the development of this thesis is the work of Swartz's (1999) doctoral dissertation, *ASL/English Interpreter Job Satisfaction*. His work shows a correlation among job satisfaction and autonomy, education, and workload (p. 127). With Swartz's permission, I aligned the job satisfaction portion of this thesis with some of the same categories used in his work. I was curious to see whether ASL/English interpreters have the same correlations to job satisfaction in 2015 as there have been several changes to the ASL/English interpreting profession since 1999. One such change is the invention of smartphones, which has had an impact on how interpreters are offered and accept jobs (L. Shaffer, Personal Communication, December 3, 2015). The first color Blackberry was available in 2003 and the first iPhone in 2007 ("Blackberry timeline," 2013; "8 years of the iPhone," 2014). A second example of change is the requirement by the Registry of Interpreters for the Deaf and the National Association of the Deaf to have

an Associate's degree by 2009 to take the national interpreting test, and by 2012 a Bachelor's degree was required to sit for the test (Registry of Interpreters for the Deaf, 2014).

Several studies indicate that strain within one's role in a practice profession is a factor that may lead to burnout (Dean & Pollard, 2013; Heller, Stansfield, Stark & Langholtz, 1986; Piko, 2006; Schwenke, 2012). Role strain is of particular interest at this time due to the growing use of the Demand Control Schema, a method of identifying and mitigating stressors which may affect an interpreting process and product (Dean & Pollard, 2013). For the purpose of this study, role strain is defined as a situation or event involving multiple, conflicting responsibilities, unexpected situational requirements, and/or ethical dilemmas—known as demands—as well as the resources, or controls, to manage those demands. Several questions in this study are specifically related to stressors and controls investigating whether or not ASL/English interpreters are still showing a connection between high stress and burnout as they did in a 1986 study on interpreter stress (Heller et al., 1986, p. 436).

All of the above studies indicate several possible correlating factors that affect job satisfaction and burnout; however, this thesis may be the first study encompassing the influences of role strain, education, background, pay, workload, autonomy, self-care, interpreting related injury, and relationships with coworkers.

### **Statement of the Problem**

While research is available related to many individual facets of ASL/English interpreting, there is little research on how aspects of interpreting may affect and influence one another. Cross-factorial studies have been conducted in other practice

professions, which yield results that link self-care, role strain, and physiological health to burnout and/or level of job satisfaction (Heller et al., 1986; Piko, 2006; Skovholt & Trotter-Mathison, 2011). The ASL/English interpreting profession may benefit from a study that maps the possible interrelationships of background characteristics, self-care, burnout, and job satisfaction in a similar fashion to other practice professions.

Additionally, from the researcher's experience, there is little information for interpreting students and potential professionals to glean an accurate representation of what being an ASL/English interpreter entails. A current description of ASL/English interpreter background, including Highest Level of Education, Type of Employment, Work Setting, Hours Worked per Week, and other work related factors can provide an opportunity to better understand those aspects of the profession. This understanding may aid aspiring interpreters and those curious about the profession in their decision to pursue an ASL/English interpreting career.

### **Purpose of the Study**

This study is designed to help identify which aspects of an ASL/English practice have the biggest impact on job satisfaction. The results of this survey also provide a snapshot of a United States ASL/English interpreter's work life. The analyzed data compares individual interpreter background characteristics to job satisfaction, role strain, burnout, and self-care. This study provides information for ASL/English professionals already in the field so that they may use it to adjust their practice to increase job satisfaction and mitigate their own burnout potential. These results also provide information that can be used to educate interpreting students in their preparation for the profession.

## **Theoretical Basis and Organization**

In 1986, Heller et al. conducted one of the first surveys of American Sign Language (ASL)/English interpreters' perception of stress. According to their research, "sign language interpreting is extremely demanding work – emotionally, intellectually, physically, and ethically" (p. 432). The reported areas of concern and stress were ethical dilemmas caused by the opposing necessities of maintaining confidentiality and debriefing after strenuous assignments related to "unstated expectations concerning working conditions, advancement, supervision, collegial support, and client's knowledge and/or respect" (Heller et al., 1986, p. 436). Despite the high stress within the field, they also reported that interpreters perceived a high level of job satisfaction.

Later, in 1999, Daniel Swartz explored job satisfaction of ASL/English interpreters. His results showed that job satisfaction has a positive correlation with autonomy and negative correlation with workload, education, and supervision (Swartz, 1999, p. 126). In a study of ASL/English interpreter burnout, Schwenke (2012) evaluated perfectionism, stress, coping resources, and burnout. Schwenke found that maladaptive perfectionism correlated with burnout and perceived stress, while adaptive perfectionism was negatively correlated with the emotional exhaustion aspect of burnout (Schwenke, 2012, p. 63-64).

Self-care for interpreters has been a developing focus of research and education for a few years. Zenizo (2013) investigated ASL/English interpreter self-care. Her findings showed that workload, lack of physical self-care, and other factors lead to increased internal stress and burnout (p. 64). In addition, she noted that interpreters who

completed her survey were more likely to identify more physical self-care habits than mental/emotional self-care habits (p. 43).

Past studies of ASL/English interpreter job satisfaction and burnout focused on specific aspects of the profession and perceptions of one's work. This study has been designed to include the multiple aspects of background characteristics, job satisfaction, self-care, role strain, and burnout.

### **Hypotheses**

This study incorporates several hypotheses:

Hypothesis 1: How One Learns ASL, Highest Level of Education, Credential level, Years of Professional Experience, How One Entered the Profession, and Graduation From an ITP are positively correlated with perceived Controls.

Hypothesis 2: The number of Hours Worked per Week, Work Settings, and Type of Employment has a direct correlation with Demands.

Hypothesis 3: Frequency of Social Interactions with Deaf community and with Other Interpreters has a negative correlation with Emotional Exhaustion and Depersonalization while also showing a positive correlation with Personal Accomplishment and Job Satisfaction.

Hypothesis 4: Job Satisfaction correlates positively to Pay, Interpersonal Aspects, Autonomy, Controls and Personal Accomplishment, while it has a negative correlation to Workload, Demands, Depersonalization, and Emotional Exhaustion.

Hypothesis 5: Physical and Mental/Emotional injury has a negative correlation with Job Satisfaction.

Hypothesis 6: Type of Physical and Mental/Emotional Self-Care correlates with Job Satisfaction.

### **Limitations of the Study**

The questionnaire was available online with links posted on Facebook to the researcher's personal profile as well as the Registry of Interpreters for the Deaf (RID) Facebook page and several other ASL/English Interpreter Facebook pages such as the Virginia Association of the Deaf, RID Interpreters of Color, ASL That, and Discover Interpreting. This online component is a limiting factor for participation due to the requirement of a Facebook account to access the form in this manner.

The researcher also printed business cards with the survey link and a QR code, then distributed the cards at a Western Region Interpreter Education Center silent weekend event hosted at Western Oregon University, July 17-19, 2015 and the Registry of Interpreters for the Deaf conference in New Orleans, August 8-12, 2015. A QR, or Quick Reader, code is a two-dimensional barcode that can be scanned with a smartphone application and links to other resources. In this instance, the QR code linked to the survey's online consent form (see Appendix B). The distribution of survey business cards expanded the possible participant sample beyond Facebook users to also include attendees at two interpreter events.

Whether received through Facebook or business card, the survey was administered in an online format. Online surveys are limited in their medium. The researcher is not available in person to probe for clarity or more responses. The participants are also not able to ask questions or request clarification from the researcher. Online surveys are also easy to overlook, which may limit the number of participants.



This study is also limited in that the participants self-reported their responses, which may not allow for consistency in data collection.

### **Definition of Terms**

*Burnout*: “a psychological syndrome in response to chronic interpersonal stressors on the job” (Maslach, Schaufeli, & Leiter, 2001, p. 399).

*Controls*: “those physical, psychological, social or organizational aspects of the job that are either/or functional in achieving work goals, reducing job demands and the associated physical and psychological costs, stimulate personal growth, learning and development” (Bakker & Demerouti, 2014, p. 312).

*Deaf*: the capitalization of this term refers to individuals who are members of a community defined by Pierre Desloges as “a society in which deaf individuals interacted, shared a common sign language, and learned from one another” (Van Cleve & Crouch, 1989, p. 1).

*Demands*: “physical, psychological, social or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs” (Bakker & Demerouti, 2014, p. 312).

*Depersonalization*: a subscale of burnout in the Maslach Burnout Inventory-Health Services Survey that “represents the interpersonal context dimension of burnout. It refers to a negative, callous, or excessively detached response to various aspects of the job” (Maslach et al., 2001, p. 399).

*Emotional Exhaustion*: a subscale of burnout in the Maslach Burnout Inventory-Health Services Survey that “represents the individual stress dimension of burnout. It

refers to feelings of being overextended and depleted of one's emotional and physical resources" (Maslach et al., 2001, p. 399).

*Horizontal Violence*: infighting within a group of people who experience stress related to powerlessness (Ott, 2012, p. 11).

*Job Satisfaction*: "the extent to which work is a source of need fulfillment and contentment" (Maslach et al., 2001, p. 399).

*Personal Accomplishment*: a subscale of burnout in the Maslach Burnout Inventory-Health Services Survey that "represents the self-evaluation dimension of burnout. It refers to feelings of incompetence and a lack of achievement and productivity at work" (Maslach et al., 2001, p. 399).

*Role Strain*: a situation or event involving multiple, conflicting responsibilities, unexpected situational requirements, and/or ethical dilemmas (Demands) and also including varying levels of resource availability (Controls). This is also referred to as role conflict (Dean & Pollard, 2013).

*Self-Care*: any mental, emotional or physical practice that is self-initiated and whose purpose is to increase or maintain a healthy lifestyle or mental/emotional state.

*Vicarious Trauma*: A composite definition of this term was written for the purpose of this paper. Vicarious trauma will be used as a global term that encompasses compassion fatigue, emotional/psychological disruption, and secondary traumatization due to working with people who experience oppression and trauma (American Counseling Association, 2011; Bontempo & Malcolm, 2012; Figley, 2005; Ott, 2012). This research does not differentiate degrees of severity.

## CHAPTER 2: LITERATURE REVIEW

The field of American Sign Language (ASL)/English interpreting is fairly new. The Registry of Interpreters for the Deaf, the professionalizing and regulating entity for the profession, was established in 1964 (Ball, 2013, p. 172). Witter-Merithew and Johnson (2004) illustrated a professional continuum, laying the profession of American Sign Language interpreters between “Marginalized Occupations” and “Emerging Profession” (p. 20). This state of continual development can lead to feelings of uncertainty and instability that permeate throughout the profession in direct relation to the advancements made in the processes of professionalizing, such as the necessary steps of establishing education and credentialing requirements (Witter-Merithew & Johnson, 2004).

The process of interpreting is complex, not only conveying the meaning of words, but also social cues and cultural idiosyncrasies (Bontempo, Napier, Hayes & Brashear, 2014; Dean & Pollard, 2013; Giovannini, 1992; Roberts, 1997). When describing some of the complexities of ASL/English interpreting, Schwenke (2012) wrote:

Students and interpreters typically work in simultaneous mode, translating between a spoken language and a manual language at virtually the same moment (Frishberg, 1990; Solow, 1996). Additionally, the assessment process to attain and maintain professional credentials stipulates that interpreters demonstrate numerous technical skills and the personal strength to cope with dynamic and stressful situations efficiently. Comprehensive professional standards established

by the credentialing bodies of the National Association for the Deaf (NAD) and the Registry of Interpreters for the Deaf (RID) require that interpreters possess the necessary linguistic, cognitive and technical skills, as well as, physical stamina, emotional stability, endurance and a willingness to adhere to an ethical code of confidentiality (RID, 2012). (Schwenke, 2012, p. 1-2)

Adding to this complexity is the array of venues in which ASL/English interpreters work: community, medical, Video Relay Services (VRS), educational/K-12, educational: post-secondary, and mental health to name a few. In these various settings, interpreters may work in teams of two or more or they may be the only interpreter, depending on the specifics of the interaction. Interpreters may also work without a team due to scheduling conflicts and lack of availability of other interpreters. This lack of supervision and support can lead to isolation of individuals within the profession (Witter-Merithew, 2012, para. 2). Professional isolation can lead to a domino effect for the individual interpreter, causing “job dissatisfaction, burn-out, distrust, fear and frustration. It can lead to feeling defensive and even hostile. In some instances, it can lead to disrespectful treatment of consumers and one another” (Witter-Merithew, 2012, para. 3). The disrespectful treatment of consumers and coworkers can further isolate an interpreter and trigger an isolation/burnout cycle (American Counseling Association, 2011; Ott, 2012; Witter-Merithew, 2012).

Witter-Merithew and Johnson (2004) also identified uncertain and nonstandard requirements for interpreting practice as another significant stressor for ASL/English interpreters. In the past 40 years, RID has provided testing and/or recognition of more than 20 different credentials and specialties (RID, n.d.). Changing credentialing processes

can not only cause self-doubt, but it also can lead to dissonance among colleagues. This insecurity or distrust in newer interpreter's credentials may contribute to horizontal violence expressed through oppression, bullying, or increased hazing (Ott, 2012). This lack of professional identity has also been shown to impact individual ASL/English interpreter confidence and performance (Bontempo et al., 2014).

An additional stressor in the professionalization process addressed in this study is changing education requirements. In 1954, the Vocational Rehabilitation Act Amendment recognized the value of individuals with disabilities in the workforce and mandated interpreting services for the Deaf (Ball, 2013, p. 171). The area of Interpreter Education was born out of this amendment and has been steadily developing since the 1950s (p. 171-177). Since the year 2000, there have been several fundamental developments in ASL/English interpreter education. The Conference of Interpreter Trainers and American Sign Language Teachers Association task force met in 2001-2002 to discuss standards for Interpreter Training Programs (ITPs) (p. 118). In 2006, the Commission on Collegiate Interpreter Education (CCIE) was incorporated (p. 123). Education standards for ASL/English ITPs have also developed through several phases since the original standards were published in 1990 by the University of Arkansas at Little Rock: *Identifying Standards for the Training of Interpreters for Deaf People* (Ball, 2013, p. 176). The current standards were established with the CCIE in 2010 (Commission on Collegiate Interpreter Education, 2010). These organizations were not the only ones to look into advancing education for interpreters. In 2009, the Registry of Interpreters for the Deaf (RID) modified their testing prerequisites to include the completion of an Associate's degree. They continued the progression by requiring a

Bachelor's degree as of June 2012 (Registry of Interpreters for the Deaf, 2014, p. 20).

While education is a necessary step for professionalization, studies have found that ITP graduates are not always ready for the workforce (Webb & Napier, 2015). Webb and Napier (2015) conducted a survey of the “readiness to work” gap of graduates from ITPs in four different countries. Their research showed that interpreter educators are experiencing high demands related to the time constraints of training programs, teaching, and skill building with limited resources (Webb & Napier, 2015). Schwenke (2012) affirmed the high demand of training through the perspective of students and novice interpreters suggesting “attaining the requisite skills and completing all educational and credentialing requirements to become an interpreter requires a time commitment as well as the ability to cope with stressors inherent to the training process” (p. 4).

Not only has the ASL/English interpreting profession shown growth and change, technology has developed exponentially in the past few decades, opening the number of communication possibilities for the Deaf and Hard of Hearing communities as well as changing the landscape for the ASL/English interpreters (Chang, 2014). The first color Blackberry was available in 2003 and the first iPhone in 2007 (“Blackberry timeline,” 2013; “8 years of the iPhone,” 2014). The development and distribution of smartphones improved communication access for Deaf and Hard of Hearing consumers through mobile text and email (Chang, 2014). Coordinators for interpreting services also benefited from the developed use of email and text in contacting and scheduling interpreters for assignments, thereby increasing the potential of booking an interpreter faster than before. One interpreter describes her experience:

I have been coordinator for both Boston University and University of Virginia. When I started at BU in 1997, coordination was done via phone, paper and pencil. Soon after my arrival, I implemented the use of email and pager (yes, pager - not smartphone in those days!). As technology has continued to improve, the speed and efficiency of arranging services has vastly improved. Also the ability to coordinate last minute requests and changes is possible where it was previously not.

There are some drawbacks - as coordinator, you have to work hard to set limits so that you are not available 24/7 despite having a smartphone. Also, students are less likely to come to my office and thus there is the challenge of developing trust and rapport whereas at BU, students came by the office often for face-to-face conversation. In addition, technology has a potentially serious drawback, that of distancing the Deaf community from participating in the coordination of service. I make a point of having every new student meet with me in person as soon as they arrive on Grounds. I would say overall though, the benefits far outweigh the drawbacks. (L. Shaffer, Personal Communication, December 3, 2015)

Another recent technological development with a large impact on the field of ASL/English interpreting is the emergence of Video Relay Service (VRS) and Video Remote Interpreting (VRI). VRS is a service, regulated by the Federal Communications Commission, whereby technology is used to facilitate communication between users of ASL and English (Taylor, 2005). Using specialized video equipment, an interpreter at a call center interprets spontaneous communication between the consumers (Taylor, 2005).

The development of VRS and distribution is the direct result of Title IV of the Americans with Disabilities Act in 2000, which requires carriers of telephone voice service to provide “functionally equivalent” communication to individuals with hearing or speech disabilities (Taylor, 2005, p. 2).

As a newer profession, ASL/English interpreting still has many unknowns and can benefit from drawing on resources and information from other human service practice professions. The four overarching categories of this study have been selected based on a previous study in a human service profession (Piko, 2006). Piko’s study “underline[s] the importance of the role of psychosocial work environment and the interrelationships among burnout, role conflict, job satisfaction and psychosomatic health” (p. 311) within the healthcare population he surveyed, which may extend to other service industries. His work found a negative correlation between job satisfaction and depersonalization while showing a positive correlation between job satisfaction and personal accomplishment. He also predicted higher levels of education as a possible mitigating factor of negative work experiences (p. 316).

Previous job satisfaction surveys influenced the development of this research. Swartz’s (1999) work shows a correlation among job satisfaction and autonomy, education and workload. Bontempo and Napier (2011) found cognitive and personality factors as influential in contributing to career success, positive job performance, and effective stress management. Schwenke (2012) referenced Maslach and Leiter, stating that specific factors such as environmental conflicts related to workload, lack of control, insufficient rewards, breakdown in community, absence of fairness, and conflicting values can influence the progression of burnout (p. 10). She also identified that research



points to physical stressors and psychological distress as culprits leading to a decline in interpreters' linguistic and cognitive abilities, physical stamina, and emotional stability (p. 4). Another impactful study was that of Heller et al. (1986), who found interpreters' perceptions of high performance expectations, limited support resources, and perceived skill inadequacies have a significant influence on burnout.

The goal of the current study is to provide an updated job satisfaction survey that includes factors such as general education level, interpreter education, credential level, how interpreters learn ASL, type of interpreting, and frequency of contact with the Deaf community outside of interpreting with job satisfaction subscales and the Maslach Burnout Inventory–Human Services Survey (MBI-HSS). Job satisfaction subscales include: contentment with pay, relationship with coworkers, perceived demands, controls, autonomy, and workload. The MBI-HSS includes the sub-scales of personal accomplishment, depersonalization and emotional exhaustion (Maslach & Jackson, 1996).

### **Previous Job Satisfaction and Burnout Research**

Publications on sign language interpreters over the years have identified various cognitive and personality factors that influence career success, job performance, and effective stress management (Bontempo & Napier, 2011). One of the first foundational studies on American Sign Language (ASL)/English interpreter stress was conducted in 1986 by Heller, Stransfield, and Langholz; their results stated that job stress is positively associated with fatigue, injury, and burnout. Heller et al. (1986) observed that interpreters' perceptions of high performance expectations, role strain, limited support

outlets, physical demands, and perceived skill inadequacies were contributing factors to burnout.

Swartz (1999) conducted a job satisfaction survey showing a positive correlation between job satisfaction and autonomy, while also showing a negative correlation among job satisfaction, education and work load (p. 126). Swartz's results also show that "education accounted for 26% of the variance in job satisfaction" (p. 127). Swartz used the Maslach Burnout Inventory (Maslach & Jackson, 1996) to gauge burnout among his participants. A lot has changed since 1999. For example, one bias listed in Swartz's research is related to interpreter's access to the Internet to take an online survey (1999, p. 129). According to the U.S. Census Bureau, the percentage of households with a computer was 51% in the year 2000 (U.S. Census Bureau, 2010) and 83.8% in 2013 (U.S. Census Bureau, 2014, p. 3). This change in Internet accessibility and use is one indicator showing a need for another survey for ASL/English interpreters.

Revisiting the factors affecting ASL/English interpreters' work and burnout, Schwenke (2012) focused on perfectionism and its correlation to stress and burnout, which she found had a significant, positive correlation (p. 63). Schwenke used the Maslach Burnout Inventory-Human Services Survey to gauge burnout in her research. This is a different version of the inventory instrument that Swartz (1999) used; the Human Services Survey version has been modified to gauge burnout among human service professions (Maslach & Jackson, 1996). In regard to the Human Services Survey, Maslach and Leiter (1997, 2008), specified factors that contribute to burnout as person-environment conflicts related to work overload, lack of control, insufficient reward, absence of fairness, and conflicting values.

In their work studying role strain—also named role conflict—Dean and Pollard (2013) have shed more light on a means to identify ASL/English interpreter stressors and resources, or controls, to manage those stressors. Through their research, Dean, Pollard, and Samar (2010) found that community freelance interpreters reported lowest job dissatisfaction, which supports the idea that specific factors, such as work setting, may influence interpreter job satisfaction and burnout (p. 42).

### **Self-Care**

According to Schwenke (2012), “Researchers identify that physical stressors and psychological distress significantly impair the interpreter’s linguistic and cognitive capacity and reduce physical stamina and emotional stability” (p. 4). In 2013, Zenizo completed her thesis research on interpreter self-care. Her work showed interpreters identify physical self-care practices, such as massage, exercise, or chiropractic care; however, only two of her participants mentioned psychological stressors related to their work (p. 43). She concluded that interpreters commented frequently on the “importance of keeping balance between time working and time not working” (p. 60). While Zenizo’s study focused on ASL/English interpreters in a Video Relay Service center, McDowell, Hilfinger Messias, and Estrada (2011) wrote of the mental multitasking required to interpret as well as the necessity to have “empathetic awareness” essential in a health setting (p. 140). This empathetic awareness, in combination with role strain and physical exhaustion helps explain why interpreters may need mental/emotional self-care to prevent burnout (p. 139). One of the goals for this current study is to identify possible correlations among the type of work an interpreter does, the type of self-care they practice, and their propensity for burnout.

The most common responses for questions related to debriefing on Zenzio's (2013) survey were to talk to someone and process a specific event, and the second most common response was self-talk and working through the event by themselves (p. 46-47). Of the kinds of physical self-care, Zenzio's study documented the most frequently identified strategies as stretching, regular exercise, and bodywork (2013). There are several types of injuries one can sustain as an ASL/English interpreter, as illustrated by the categories in Zenzio's study: shoulder, neck tension, rotator cuff, bursitis, pain, numbness, and other injuries. In fact, half of Zenzio's participants identified interpreter related injuries (p. 57). Zenzio's study of VRS interpreters also supports research by Dean, Pollard, and Samar (2010), who used an occupational health risk comparison of ASL/English interpreters in different settings and compared the health risk against a database of other professions, called the JCQ normative database. They found that VRS interpreters and interpreters working in K-12 educational settings face greater occupational health risks than community/freelance and staff interpreters; the highest risk was associated with VRS interpreters.

A high occupational health risk associated with ASL/English interpreting falls in line with previous studies of the specific musculoskeletal impact of sign language interpreting. Feuerstein, Carosella, Burrell, Marshal, and DeCaro (1997) found that "the tasks involved in sign language interpreting can expose the musculoskeletal system to excessive amounts of repetition, force, and awkward postures" (p. 188). They also identified causes of pain to be rapid hand movement, frequently hitting hands together, unpleasant physical conditions at work, and unclear responsibilities at work. The pattern they identified in their study indicated that "a combination of fear related to pain, job

stress (psychological and physical stressors), years exposed, and work style all contribute to increased pain in fingers, hands, wrists, and forearms” (Feuerstein et al., 1997, p. 202).

Freeman and Rogers (2010) showed an additional source of health risk. Their research shows that 38% of their sample of interpreters reported “their most painful symptoms were associated with maintaining a static posture (either standing or sitting) and were present in their neck, back, and/or shoulders. The other 62% reported their pain occurred in the hands, wrists, and/or fingers” (p. 328).

There are several self-care practices to combat these occupational risks. Zenio (2013) suggested that interpreters include adequate rest, signing smoothly, avoiding hard hit contacts, focus on calm thoughts, wear supplementary supports for wrists and/or elbows, use topical ointments, maintain good posture and ergonomics, do not over work themselves, and maintain positive, supportive relationship with colleagues (p. 53-54).

### **Vicarious Trauma and Compassion Fatigue**

In the words of Czech author, Milan Kundera, “There is nothing heavier than compassion. Not even one’s own pain weighs so heavy as a pain with someone and for someone, a pain intensified by the imagination and prolonged by a hundred echoes” (as cited in Harvey, 2003, p. 207). The American Counseling Association (2011) defined vicarious trauma as “the emotional residue of exposure” to “the pain, fear, and terror that trauma survivors have endured” (p. 1). Vicarious trauma has also been described as “the absorbing of another person’s trauma” (Vigor, 2012, para. 3). Vigor continued by saying nearly all language interpreters experience some symptoms of “vicarious trauma, burn out, compassion fatigue, or increased stress as a result of their repeated exposure to

traumatic information and stories” (para. 2). Harvey (2001) stated that trauma is, in fact, contagious (p. 96).

The impact of vicarious trauma on an individual ASL/English interpreter varies, depending on that person’s “history, resilience, personality, coping mechanisms, maturity, training, experience in the field, gender, and cognitive ability. External elements such as the severity of the situation, the environment, and the nature of the content being interpreted can also be factors” (MacDonald, 2015, p. 4). Vicarious trauma’s effects can include flashbacks, dreams/nightmares, being easily startled, change in eating habits, low self-image, withdrawal, isolation, difficulty talking about feelings, diminished joy and sense of accomplishment, feeling trapped by work, blaming others, overworking, rejecting closeness, poor communication, avoidance of traumatic assignments, frequent tardiness to work, apathy, relationship difficulties, and decreased product quality. There can also be physical consequences including sleeping issues, physical pain, headaches, exhaustion, stomach problems, and other health deterioration (American Counseling Association, 2011; Bontempo & Malcom, 2012; MacDonald, 2015; Splevins, Cohen, Joseph, Muray, & Bowley, 2010; Vigor, 2012).

There are several researched reasons for the impact of vicarious trauma on sign language interpreters. Harvey (2001) stated that seemingly small instances of mundane oppression are insidious and can be cumulative. There is a “cost to caring” (p. 86). Interpreters have susceptibility to vicarious trauma simply as human beings working in situations where it is human to have an emotional response (MacDonald, 2015; Vigor, 2012). Working with individuals who have experienced trauma, interpreters—like therapists and other professionals who interact directly with others—are at risk for

developing cumulative occupational stress reactions like burnout, vicarious trauma and compassion fatigue (Anderson, 2011). Unlike therapists, however, many interpreters may not recognize their vulnerability or have strategies in place to manage it (Anderson, 2006; Harvey, 2001, 2003).

Moreover, sign language interpreters do not only witness trauma, they are “facilitating the exchange of the disturbing or emotionally-charged information, and thus have a unique experience with vicarious trauma, differing from other professionals” (MacDonald, 2015, p. 7). The result of facilitating this exchange is that the interpreter utilizes a deeper quality of listening to the message (Anderson, 2011; MacDonald, 2015; Vigor, 2012). “Being able to see the world of human need through multiple viewpoints can be valuable. Sometimes, though, those in the caring professions lose touch with their own viewpoint, their own needs” (Skovholt & Trotter-Mathison, 2011, p. 5). “Interpreters report that they not only listen to, and are present for, the retellings of traumatic experiences by clients who perpetrate or have experienced trauma, but they also interact with the trauma material on a visceral level” (Anderson, 2011, p. 11-12). In conveying the contextual and cultural meanings behind the message, sign language interpreters “channel” the disturbing events (Vigor, 2012). In fact, the use of first-person voice, which is typical in professional interpreting, has been thought to increase the interpreter’s risk of experiencing vicarious trauma (Bontempo & Malcom, 2012). As Vigor (2012) stated, “You start associating with the story much more than if you were just reading or hearing about it, and you unwittingly start to absorb the trauma as if it were your own” (p. 3). Sign language interpreters do not only process and engage with the material on an auditory level, but also visually. The sign language interpreter visualizes the scene of

brutality or persecution, thereby increasing the cognitive and dynamic investment in the material (Anderson, 2011; MacDonald, 2015).

One possible result of vicarious trauma is compassion fatigue. Compassion fatigue is the term used to illustrate the action of forming a self-protective shell of isolation behind which the individual looks out only for themselves, caring for no one else (Figley, 1995). Harvey (2001) identified one type of response ASL/English interpreters have to vicarious trauma as “affective numbing,” which is when one becomes too callous and indifferent (p. 96). According to Vigor (2012), “It is what happens to your physical, psychological, emotional and spiritual health in response to someone else’s traumatic history” (para. 3). While this may be a common reaction, it is not indicated as a healthy choice (American Counseling Association, 2011; Harvey, 2001; Vigor, 2012). Harvey (2001) wrote that although the distancing attitude gives the illusion of not being impacted by another’s pain, “our shield—our running away from our own vulnerability—in fact insidiously leads us to *a self imposed exile*” (p. 96).

The field of ASL/English interpreting once encouraged the distancing of interpreters from the meaning and message of their work by encouraging them to be “invisible, neutral, and uninvolved” (Bar-Tzur, 1999, para. 3). This mindset is in part the result of an ethical code that emphasized confidentiality, neutrality, and impartiality (Jansen & Korpinski, 2005). Uncertainty may contribute to an interpreter’s identification of vicarious trauma and their acceptance of their susceptibility as well as their need to work on maintaining mental well-being (Harvey, 2003). The ASL/English interpreter’s current Code of Professional Conduct was established in 2005 (Registry of Interpreters for the Deaf, 2005). In her book *Sign Language Interpreting: Deconstructing the Myth of*



*Neutrality*, Metzger (1999) denounced the idea that ASL/English interpreters can objectively and accurately convey a message without influence because they bring themselves into the interpretation. When an interpreter fully removes himself or herself from the interpreted message, so as to not be affected by it, the conveyed message lacks intuition and sensing, which results in an insufficient interpretation (MacDonald, 2015). The concept of restricting the interpreter's personal impact on the message has been misconstrued to imply that the interpreter *must not be* impacted by the message (MacDonald, 2015). Pearlman and Saakvitne (1995) have noted that "it is possible to act neutral in high-stress situations, but one cannot feel neutral" (as cited in Harvey, 2003, p. 207). These realizations shed light on our understanding of ASL/English interpreters and vicarious trauma.

Building on the established foundations of studying vicarious trauma and interpreters, Harvey (2001) identified one result as self-victimization, the state in which someone feels selfish taking care of themselves and feels selfless to the extreme of injuring their own emotional, mental or physical state (p. 88). Under this conviction, interpreters may continue to work in situations with unhealthy conditions, when they are ill, and/or at jobs that trigger trauma for them, which ultimately increases their risk of psychological and physical consequences (Harvey, 2001). He stated:

An interpreter may interpret under unhealthy conditions - long beyond half-hour stints - in spite of consistent warnings from the medical community. One may work when seriously ill and at jobs that trigger intense trauma and hurt. Carpal tunnel syndrome and other forms of repetitive strain injury are a common and debilitating outcome (Dean & Pollard, 2001)... one's decision to typically work

an overly long stint may be related to *unresolved vicarious trauma* manifested as a form of self-victimization (Harvey, 2001, p. 88-89)

Harvey (2001) described two components of empathy: the affective and the cognitive.

“The affective component has to do with feeling emotionally connected without boundaries or constraints” when one takes on the emotions of another person as their own (p. 89). The cognitive component of empathy is founded in reminding oneself that even though one feels the emotions of another, each is still a distinct person (Harvey, 2001).

Harvey (2001) also connected self-victimization to vicarious trauma with burnout, though he stated this is often simplified as only being stress-related. To this effect, vicarious trauma and its effects may not be readily recognizable by the people impacted, especially since it is slow to develop and the injuries are cumulative. If not addressed, vicarious trauma and compassion fatigue may reduce the quality of the affected individual’s life by leading to isolating oneself, irritability, disengagement, difficulty with rewarding relationships, avoidance, overworking, minimizing, hopelessness, denial, blaming, apathy, distress, low motivation and aggression, which lead to numbness, bitterness, and depression (American Counseling Association, 2011; Bontempo & Malcom, 2012). These mental/emotional hardships also “erode professionalism through increased cynicism, loss of feelings of safety, disengagement, and impaired judgment” (Anderson, 2011, p. 2). Furthermore, “a common built-in risk to helping is that we may unwittingly get angry at those who do not appreciate our good efforts” (Harvey, 2001, p. 92). Ott (2012) found indications of communication difficulties similar to those associated with vicarious trauma and compassion fatigue within the ASL/English interpreting field. Ott (2012) encouraged future research on the culture of ASL/English

interpreters to identify whether horizontal violence, “infighting within a group of people who experience stress related to powerlessness” (p. 11), is perpetuated within the profession.

Research has been conducted on positive coping strategies in response to vicarious trauma, compassion fatigue and burnout (Bontempo & Malcom, 2012; Harvey, 2001). Some of these strategies include “forgiving mistakes, humor, problem solving, hobbies, peer and social support, receiving mentoring, spiritual care, counseling, exercise, journaling, and leaving a transition time between work and home to help compartmentalize thoughts” (Bontempo & Malcom, 2012, p. 118).

Harvey (2001) suggested that the first step in addressing emotional trauma is to recognize it, then learn to understand it so that vicarious trauma can have the potential to become a “transformative experience” (p. 95). In line with this recommendation to recognize and learn from our experiences, Dean and Pollard (2013) framed the Demand Control-Schema as a template to discuss the stresses related to sign language interpreting assignments as well as possible resources or controls that can be used to mitigate those stresses. Along the same lines, Anderson (2011) found that peer groups helped participants to feel validated in their struggles, decreased their stress levels, helped them feel better prepared to handle encounters with vicarious trauma triggers, and boosted their perception of support from colleagues. In Vigor’s (2012) discussion of trauma with an interpreter, participants identified that talking to a friend who is an interpreter has helped reduce the effects of the trauma because the interpreter serving as a sounding board has the background knowledge to understand the risks on interpreting in certain situations. In other words, “an interpreter who is aware of potential stressors has already taken a step

toward needed self-care” (Crezee, Atkinson, Pask, Au, & Wong, 2015, p. 75). Ott (2012) and Witter-Merithew (2012) also identify reflective practice, such as peer discussions, as a way to battle isolation and other effects of horizontal violence and emotional impacts of interpreting.

However, it takes strong discernment skills to discuss an assignment and its impact on a personal level, without giving details of the assignment that would break confidentiality (MacDonald, 2015). Including debriefing skills like these is strongly suggested in interpreter training programs as well as education on the possible progression of negative impacts of common stressors (Crezee et al., 2015; Bontempo & Malcom, 2012). In Vigor’s (2012) interview, the interpreter suggests small gestures by saying that “knowing that I help people to communicate makes it worthwhile. And when I start an assignment and people tell me they are happy that I’m there for them, that makes it worthwhile” (para. 17). Crezee et al. (2015) gave several suggestions for battling burnout and other emotional effects of interpreting, including setting leisure time, family time, healthy meals, limiting workload, using discernment when accepting work assignments, rest, counseling, and debriefing (Crezee et al., 2015).

### **Role Strain**

For the purpose of this research, role strain is defined as a situation or event involving multiple, conflicting responsibilities, unexpected situational requirements, and/or ethical dilemmas and also including varying levels of resource availability. This can also be referred to as role conflict (Dean & Pollard, 2013).

Professional standards and consistency of work hinge on first defining the role of individuals within a profession (Swabey & Mickelson, 2008). The profession of

American Sign Language (ASL)/English interpreting developed quickly in response to exponentially increased need, but in doing so, the profession grew without a strong, systematic foundation (Swabey & Mickelson, 2008). Any field that involves human interaction can be unpredictable. When these unpredictable interactions are paired with interpreters who are still developing their standards of practice, this creates an ideal situation for the non-ideal consequence of role strain (Skovholt & Trotter-Mathison, 2011).

Swabey and Mickelson (2008) described the four phases and two ethical codes the ASL/English interpreter profession has progressed through since its inception in the 1960s: helper model, machine/neutral stance, communication facilitator, and bilingual/bicultural model, the most current (p. 52-54). The Registry of Interpreters for the Deaf (RID) established the Code of Ethics for ASL/English interpreters in 1974, which was a rule-based model emphasizing literal interpretations of the tenets (p. 53). The ethical code set forth by the RID and National Association of the Deaf (NAD) was updated in 2005 and is still the current Code of Professional Conduct (CPC). The CPC is based on a more rights-oriented approach and includes explanations of the values and principles guiding the tenets as well as examples of how to follow them (Jansen & Korpinski, 2005; Registry of Interpreters for the Deaf, 2005; Swabey & Mickelson, 2008).

ASL/English interpreting requires critical thinking skills and decision-making skills that combine knowledge of the languages involved, context, cultural considerations, and intent of an interaction (Swabey & Mickelson, 2008). In situations

with so many influencing factors, there is the potential for role strain or conflict. Swabey and Mickelson continued:

Conflict may occur when one or both of the consumers do not understand the interpreting process or the interpreter's function in that setting, when the consumers' and interpreter's expectations are incongruent, or when the interpreter does not have a clear understanding of his or her primary function in that setting. If the interpreter lacks this clear understanding and, as a result, makes decisions inconsistent with standards of practice in the field, role conflict occurs. (Swabey & Mickelson, 2008, p. 52)

This potential for role strain is compounded when taking into consideration the ASL/English interpreting profession is still very heterogeneous. Often times the interpreter's role is not defined by a professional standard, but by how the hiring institution uses that interpreter and what the institution needs (Rudvin, 2007). This leads to role ambiguity among different work settings.

Even with an updated, rights-based CPC, the role and decision-making of ASL/English interpreters can be inconsistent. Swabey and Mickelson (2008) noted that ITPs are not graduating ASL/English interpreters ready to enter the workforce; new graduates do not have entry-level competencies. This increases role strain among interpreters, as the novice professionals lack the skills needed to work competently and effectively.

Other factors Swabey and Mickelson listed as influential to role ambiguity are: demand for interpreters outweighs the supply, lack of supervision, lack of case studies,

limited opportunity for students to learn the language and culture from Deaf community members, and the development of the Video Relay Service (VRS) interpreting setting.

In response to the role ambiguity leading to role strain, Dean and Pollard (2001, 2013) developed the Demand Control Schema (DC-S) from the work of Karasek.

Karasek (1979) created a framework to compare individual job demands (strain) and controls (or resources) to predict job satisfaction. Dean and Pollard (2013) elaborated on the various demands an interpreter may experience and created a framework to analyze those demands, as well as identify controls to address them. This DC-S model can be used as part of an ASL/English interpreter's ethical decision-making and role definition as it is a framework by which interpreters can objectively identify challenges, or *demands*, they encounter in their work as well as identify possible resources, decisions, or *controls*, they can use to mitigate those demands either in a group setting or individually (Dean & Pollard, 2013). The demands and controls of interpreting are not consistent in all settings and, in fact, fluctuate depending on the interpreter and the setting. Dean, Pollard and Samar (2010) found that interpreters who work in a VRS setting have the highest demand control imbalance, with the educational (K-12) setting having the second highest imbalance. This results in negative consequences such as health problems and lower productivity (p. 42).

Being able to identify the individual demands specific to a profession has many benefits. Stebnicki (2008) stated that a person can be less susceptible to burnout, compassion fatigue and vicarious trauma if they can recognize their feelings and demands. Bontempo and Malcom (2012) advocated for peer groups and discussion within interpreter training and within the profession to develop trust and coping strategies. DC-S

and supervision dialogue are also supported by the statement, “discussing with students potential stressors and suggestions for action ... will help interpreters maintain their mental, emotional, and physical health” (Crezee et al., 2015, p. 77). Crezee et al. (2015) also gave recommendations for noticing the signs of stress within oneself, including honestly assessing one’s own vulnerabilities, limitations, and coping strategies.

Peer groups and discussions, such as dialogic work analysis Supervisions as part of DC-S, are also supported in research by Anderson (2011). Anderson studied professional peer groups and found a strong positive relationship between group meetings and increased perception of being part of a positive professional network, as well as developing a variety of strategies for managing self-care. Anderson continued: “Professional peer groups help, in part, by de-stigmatizing the disturbance and detecting and clarifying distorted perspectives that might have developed as a result of working in close proximity to clients’ stories of trauma” (p. 2).

Using the DC-S framework and participating in peer groups is also a form of reflective practice, which has several documented benefits that can diminish burnout. Witter-Merithew (2012) defined reflective practice as

A method of self-evaluation and a way of improving performance in professional tasks. By reflecting on how we can improve our work, we increase our awareness of what we are doing and constantly learn and grow as professionals. As well, it is an excellent tool for overcoming our isolation and enabling us to benefit from the shared listening and support of other practitioners. (para. 6)

Ott (2012) noted that reflective practice has been shown to lower stress and increase perceptions of control, which decreases horizontal violence. She also noted the



counterproductive behavior of recipients of horizontal violence who are less likely to open up about their experiences, which can increase isolation.

## **Conclusion**

ASL/English interpreting research has pointed to a myriad of factors that may contribute to job satisfaction, including individual backgrounds, self-care, burnout, and the subcategories of pay, interpersonal interactions, demands, controls, autonomy, and workload. Analyzing specific correlations among the categories as well as identifying the factors with the biggest impact to job satisfaction may aid interpreters in designing their work experience.

## CHAPTER 3: METHODOLOGY

This study was designed to gather both qualitative and quantitative data on American Sign Language (ASL)/English interpreters working in the United States. The study used a mixed method approach to explore the relationship among job satisfaction, background characteristics, self-care and burnout for ASL/English interpreters with the overall goal of identifying which aspects have the greatest impact on job satisfaction. The secondary goal was to provide a snapshot of the profession for those new to the field or interested in becoming an interpreter.

### **Design**

Taking into account the complexity of gauging job satisfaction, self-care, and burnout—which are qualitative, psychological factors—as well as analyzing quantitative background characteristics, the study used a mixed-methods survey. This study was a single, online questionnaire comprised of four parts: background characteristics, self-care, job satisfaction, and burnout (see Appendix A). Background information includes: Gender, Ethnicity, Highest level of Education, How One Learned ASL, Years of Professional Experience, How One Entered the Interpreting Profession, Frequency of Social Interaction with the Deaf Community, Frequency of Social Interaction with Other Interpreters, Type of Employment and Work Settings. The self-care questions were framed as open-ended questions where participants disclosed their physical and mental/emotional self-care strategies. Participants also identified whether they had experienced a physical injury or mental/emotional hardship in the past 12 months. The

job satisfaction section of the survey was loosely based on the job satisfaction survey from Swartz (1999). Burnout was gauged through the Maslach Burnout Inventory-Human Services Survey (MBI-HHS), which differentiates three subcategories relating to burnout: Depersonalization, Personal Accomplishment, and Emotional Exhaustion (Maslach & Jackson, 1996).

### **Survey Distribution**

The questionnaire was available online July 10, 2015 through August 27, 2015 with links to the consent form (see Appendix B) posted on Facebook to the researcher's personal profile and several other professional Facebook pages, such as the Registry of Interpreters for the Deaf (RID) Facebook page, RID Regional pages, the Virginia Association of the Deaf, RID Interpreters of Color, ASL That, and Discover Interpreting, and several other ASL/English interpreting related pages. Business cards were also printed with the consent form link and a QR code. The business card stated:

I am a student in the Master of Arts in Interpreting Studies program at Western Oregon University. I am conducting my thesis research on factors contributing to American Sign Language/English Interpreter job satisfaction. Please take 15-20 minutes to complete this anonymous questionnaire. Thank you for your time,  
Carrie N.H. Humphrey.

The researcher distributed these cards at a Western Region Interpreter Education Center silent weekend event hosted at Western Oregon University, July 17-19, 2015 and at the Registry of Interpreters for the Deaf national conference in New Orleans, August 8-12, 2015. The online medium of this questionnaire also allowed for responses to potentially be gathered using the snowball method based on the researcher's word of

mouth requests (Hale & Napier, 2013). All results were anonymous and participants were not required to complete the questionnaire if they did not feel comfortable doing so for any reason.

### **Survey Methods**

The survey was open to those who identified as ASL/English interpreters in the United States and was open for six weeks, July 10 – August 27, 2015. One hundred participants responded; of those, 81 fell within the parameters of study for this research. The first section of the survey collected demographic and background information including: Gender, Ethnicity, Highest Level of Education, Graduation From an Interpreter Training Program, and Credential Level. The survey continued by examining Years of Professional Experience, Work Settings, How One Learned ASL, How One Entered the Profession, Type of Employment, Work Settings, Hours Worked per Week, Frequency of Social Interaction with the Deaf Community, and Frequency of Social Interaction with Other Interpreters outside of work.

The second section consisted of five open-ended questions that gathered qualitative data on Physical Self-Care, Mental/Emotional Self-Care, Physical Injury in the past 12 months, Mental/Emotional Hardship in the past 12 months, and a section to add any other pertinent information regarding self-care. Some participants chose not to write in responses to this section. There was no penalty for not completing this portion of the survey and all participants were able to proceed to the next section.

The third section was the Job Satisfaction survey and subscales. The subscales were comprised of questions to gather data on satisfaction regarding Pay, Interpersonal aspects, Autonomy, and Workload, Demands and Controls.

The fourth section of the survey was the Maslach Burnout Inventory-Human Services Survey (MBI-HSS). The MBI-HSS has three subscales that indicate levels of burnout: Depersonalization, Personal Accomplishment, and Emotional Exhaustion. The researcher purchased the appropriate license to use this survey in an online format and to modify the survey. The key to this survey totals the answers per subcategory to fall within a low, medium, or high level. For this study, the subcategory questions were averaged so that the variables were continuous. Questions 12 and 16 of the MBI-HSS were not included in this survey to keep the survey as concise as possible. According to Bria, Spanu, Baban, and Dumitricu (2014) the validity of the Maslach Burnout Inventory is increased if questions 12 and 16 are excluded.

The consent form for the survey was posted as a wix.com website, and the questionnaire was administered through a Google form. This medium allowed for access to both the consent form and survey from a computer or mobile device.

### **Participants**

Participants were ASL/English interpreters in the United States with five or more years of experience. The researcher selected only participants with a minimum of five years of experience, deleted one duplicate, and one participant's response with only five questions answered. This resulted in 81 usable responses in the data set. This sample incorporates a varied group of individuals shown in Table 1. Within the sample of 81 participants, 92.6% respondents are female and 7.4% male; 71.6% have a Bachelor's degree or higher education level; 80.2% are categorized as Certified; and 56.8% have interpreted 5-14 years, 29.6% have interpreted 15-25 years, and 13.6% have interpreted for 26 or more years.

Table 1

*Participant Characteristics*

	<u>Frequency</u>	<u>Percent</u>
Gender		
Male	6	7.4%
Female	75	92.6%
Ethnic Origin		
Euro-American/White	71	87.70%
Asian American/Pacific Islander	3	3.70%
Hispanic/Latino(a)	3	3.70%
African American/Black	1	3.70%
Prefer not to answer	3	1.20%
Highest Level of Education		
High school	7	8.6%
Associates	16	19.8%
Bachelors	30	37.0%
Masters	26	32.1%
Doctorate	2	25.0%
Graduation From an Interpreter Training Program		
No	25	30.9%
Yes, certificate of completion	10	12.3%
Yes, associates	25	30.9%
Yes, bachelors	15	18.5%
Yes, masters	6	7.4%
Credential Level		
None	8	9.9%
State	8	9.9%
National	65	80.2%
Years of Professional Experience		
5 to 14	46	56.8%
15 to 25	24	29.6%
26+	11	13.6%
	n=81	100%

**Data Preparation**

One hundred people responded to the online survey. This survey explored the patterns of ASL/English interpreters who are established in their work and, therefore,

only those respondents who selected five or more years of experience were included in the data reported here. Seventeen respondents were not included in the statistical analysis because they indicated they had 0-4 years of experience. Two responses were identical in every aspect, including the typed responses to the open-ended questions; one of the two responses was viewed as a duplicate and was not included in the data analysis. Another respondent answered only the first five questions and was not included in the data analysis. Ultimately, there are 81 participants whose responses fell within the parameters to be included in the statistical analysis.

Five questions (29, 31, 32, 33, 34) were phrased negatively and were recoded as 1=5, 2=4, 4=2, and 5=1 before calculating their subcategory values. This recoding maintains “1” in the subcategory as “agree” and “5” as “disagree” for the entire subcategory. Each subcategory in section three—job satisfaction, and section four—burnout, was run through the Chronbach’s Alpha test to determine the internal consistency of the subcategories. As a result, question 26 was deleted to optimize the Pay subscale; question 40 was deleted to optimize the Demand subscale; and question 42 was deleted to optimize the Workload subscale. Question 5 had one missing data point and in accordance with procedures outlined by Allison (2002) the mode of this variable was substituted for the missing data point. Questions 8, 9 and 10 were excluded, as they did not fit into any other variable categories of the survey.

### **Coding**

Several questions were written to elicit open-text responses due to the variety of answers available and to prevent limiting the responses.

**Type of credential.** The data for credential type was coded as National, State and None. Participants who identified as having both state and national credentials were coded as National according to their highest credential. National certification included any certifications recognized by the National Association of the Deaf (NAD) and Registry of Interpreters for the Deaf (RID), including Educational Interpreter Performance Assessment (EIPA) of 4.0 and above, as well as Board for Evaluation of Interpreters (BEI) certifications at all levels (Texas Department of Assistive and Rehabilitative Services, n.d.). State credentials include state level Quality Assurance Screenings (QAS) at all levels, EIPA level 3.9 and below, the Educational Signed Skills Evaluation (ESSE), and all other tests the participants identified as state tests. Participants who responded as not having credentials, passing a fluency test, or passing only the written portion of a test were coded as None.

**How did you learn American Sign Language?** Responses to this question were coded as Heritage, Deaf community, and/or Academic setting. A participant could be in multiple categories if they self-identified as such. A participant was identified as a Heritage signer if they had one or more Deaf parents. Some examples of responses in the Deaf community category were: Deaf community, working at a Deaf school, socializing, and Deaf babysitter. Examples of responses in the Academic category are college, training programs, and classes.

**Physical self-care.** The physical self-care category had eight patterns identified in the free-response questions: Bodywork, Exercise, Food, Interpersonal, Intrapersonal, Rest, Medical, and None. If a participant did not respond to the question, they were not included in the physical self-care analysis. Examples of each subcategory include:



- Bodywork: chiropractor, massage, stretching, acupuncture
- Exercise: running, walking, group exercise
- Food: eating healthy, diet, eat in moderation
- Interpersonal: debriefing, talking with spouse, talking with other interpreters, counseling, spending time with friends, time with family
- Intrapersonal: breathing, yoga, watching TV, Facebook, gardening, reading
- Rest: regular breaks, vacation, getting enough sleep, relaxing
- Medical: doctor checkups, medication
- None: None.

**Mental/Emotional self-care.** The mental/emotional self-care category had 11 patterns identified in the free-response questions: Bodywork, Exercise, Hobbies, Food, Interpersonal, Intrapersonal, Rest, Medical, Boundaries, Religion, and None. If a participant did not respond to the question, they were not included in the mental/emotional self-care analysis. Some examples of each subcategory are below:

- Bodywork: chiropractor, massage, stretching, acupuncture
- Exercise: running, walking, group exercise
- Hobbies: playing or listening to music, knitting, hobbies
- Food: eating healthy, diet, eat in moderation, chocolate
- Interpersonal: debriefing, talking with spouse, talking with other interpreters, counseling, spending time with friends, time with family
- Intrapersonal: breathing, yoga, watching TV, Facebook, gardening, reading
- Rest: regular breaks, vacation, getting enough sleep, relaxing
- Medical: doctor checkups, medication

- Boundaries: learning to say no, leaving work at work
- Religion: church, religion, prayer groups, prayer
- None: None.

### **Data Analysis Procedures**

Support for statistical analysis was provided by Christopher Bradley from [www.thedissertationcoach.com](http://www.thedissertationcoach.com). Percentages and frequencies of responses were calculated through descriptive statistics. Each of the 60 variables organized from the survey (see Appendix C) were entered into a Bivariate Pearson Correlation (see Appendix D) to identify positive and negative linear relationships between pairs of variables. The variables were also entered into a multiple linear regression with a Method: Stepwise algorithm; Job Satisfaction was the dependent variable. A multiple linear regression is used when a study has a single dependent variable that is continuous in nature and multiple independent variables that are either measured or continuous (Ritchey, 2008). A Method: Stepwise algorithm for linear regressions generates a prediction equation with only the predictor variables that have statistically significant relationships with the dependent variables (Allison, 1999).

### **Methodological Strengths**

By using a mixed methods approach, the survey gathered a variety of responses and multiple types of data. The qualitative data gathered through open-ended questions provided the opportunity for participants to include a wide scope of responses. Participants were able to include their own experiences and views, which resulted in a range of responses on the questions of self-care, type of credentials, and how they learned American Sign Language. The quantitative data were gathered through multiple choice,

Likert scales, and multiple selection questions. Another strength is the variety of participants. Multiple backgrounds, work settings, and years of experience are represented in this sample, which affords representation from multiple perspectives.

### **Methodological Limitations**

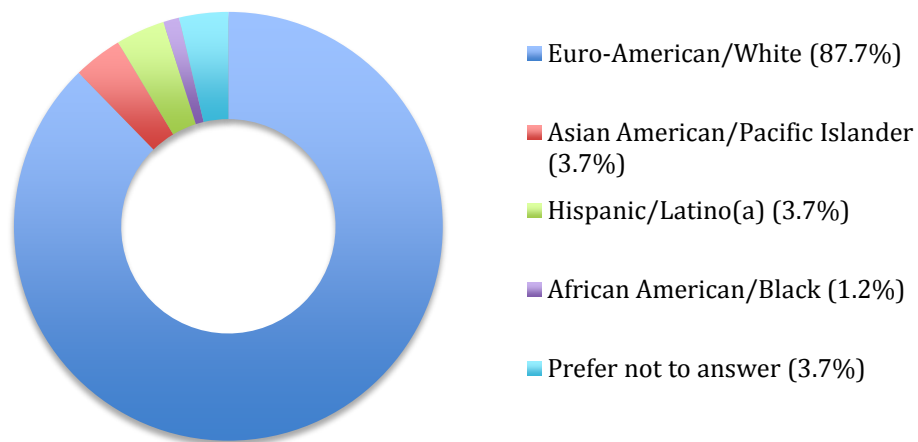
The online component of this survey is a limiting factor for participation due to the requirement of a Facebook account to access the form in this manner. The distribution of survey business cards expanded the possible participant sample beyond Facebook users to also include participants of two interpreter events; one in Oregon and one in Louisiana.

The survey was administered in an online format, whether received through Facebook or business card. Online surveys are limited in their medium. The researcher was not available in person to probe for clarity or responses and participants were not able to ask questions or request clarification from the researcher. The survey also depended on self-reporting and did not have a method of ensuring accuracy, consistency, or truthfulness of responses. Online surveys are also easy to overlook, which limits the number of participants.

## CHAPTER 4: FINDINGS

### Respondent Characteristics

This study includes data on 81 American Sign Language (ASL)/English interpreters in the United States and can provide a view of the interpreting profession from their perspective. Six respondents (7.4%) were male and 75 (92.6%) were female.



*Figure 1. Participant Ethnic Origin*

When comparing the participant demographics to the demographics of the Registry of Interpreters for the Deaf (2015) *2014 Annual Report*, both show more women than men, 86-88% Euro-American/White, and 3.7-4% Hispanic/Latino(a) (See Figure 1). This study has a lower African American/Black percentage and a higher Asian American/Pacific Islander percentage (Registry of Interpreters for the Deaf, 2015).

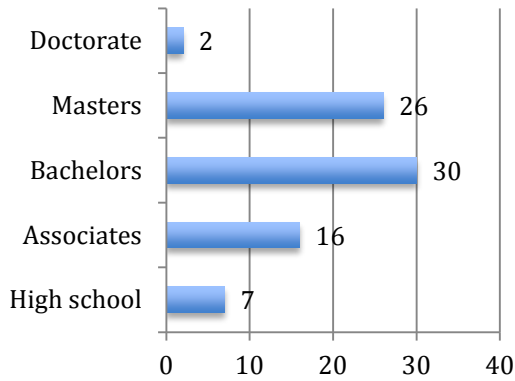


Figure 2. Highest Level of Education

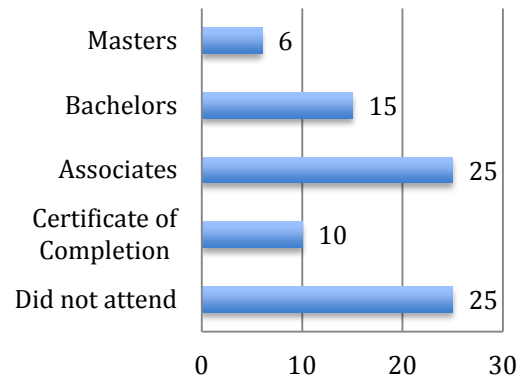


Figure 3. Graduation from an ITP

The plurality of participants (37.0%) indicated that a Bachelor's degree is their highest education level, with only slightly fewer participants having a Master's degree as their Highest Level of Education (Figure 2). In contrast, participant Graduation From an Interpreter Training Program (ITP) was tied at the Associates degree level and not attending an ITP (see Figure 3).

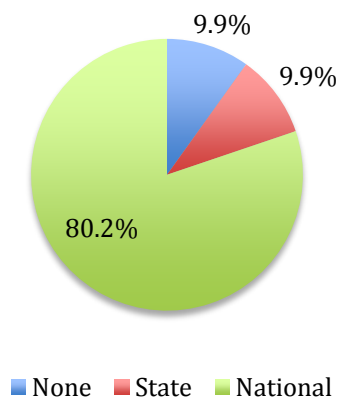


Figure 4. Credential Level

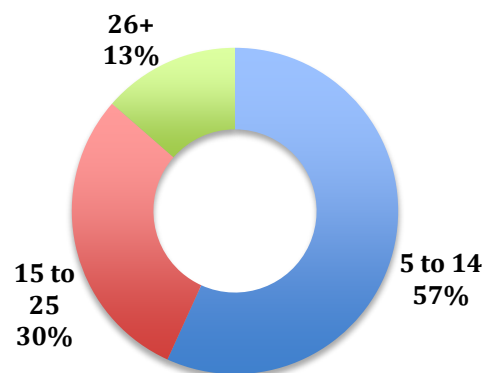


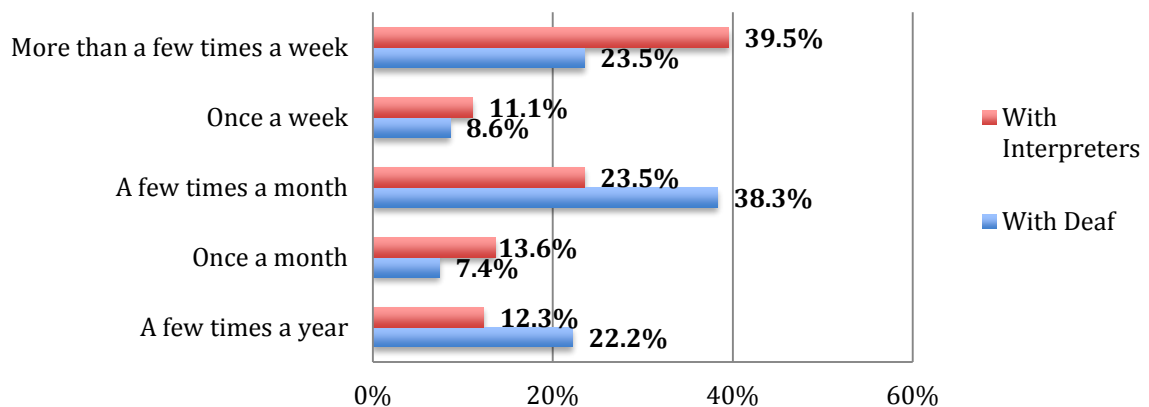
Figure 5. Years of Experience

The majority of participants in this survey were Certified (80.2%; Figure 4) and the numbers of interpreters working without credentials and working with a State Credential were equal. The largest percentage in years of experience was 5-14 years (57%; Figure 5) and only 13% of respondents have been interpreting professionally for 26 years or more.

Of the participants responding in the survey, most work 30-40 hours a week (Figure 6), socialize with other interpreters more than a few times a week, and socialize with the Deaf community a few times a month (Figure 7).



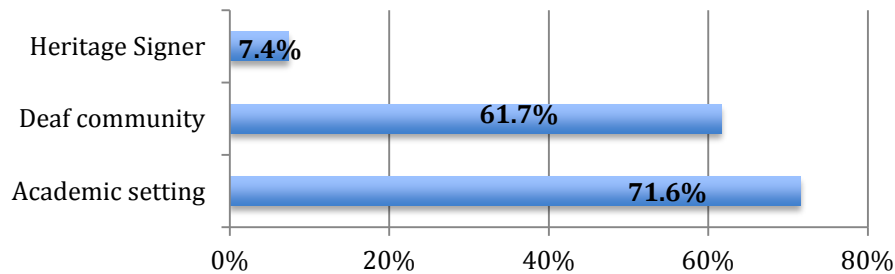
*Figure 6. Hours Worked per Week*



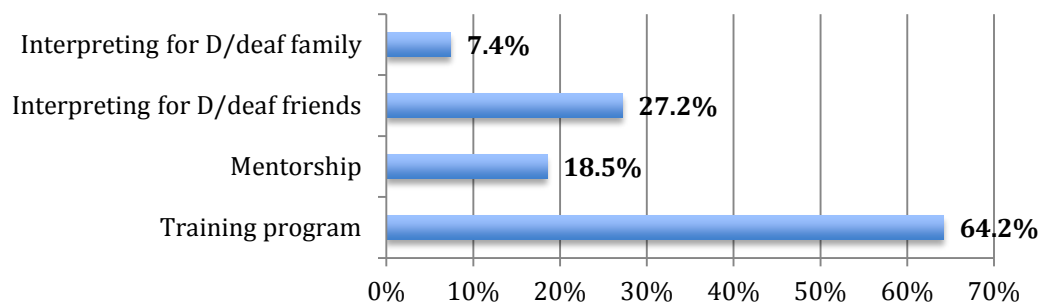
*Figure 7. Frequency of Social Interactions*

Most of the study participants learned American Sign Language (ASL) through an academic setting (71.6%) and/or the Deaf community (61.7%; Figure 8). Six participants (7.4%) identified learning ASL as a Heritage signer with Deaf parent(s). The same six

participants indicated they entered the profession by Interpreting for D/deaf family (Figure 9). A large majority of the participants entered the interpreting profession through their ITPs.

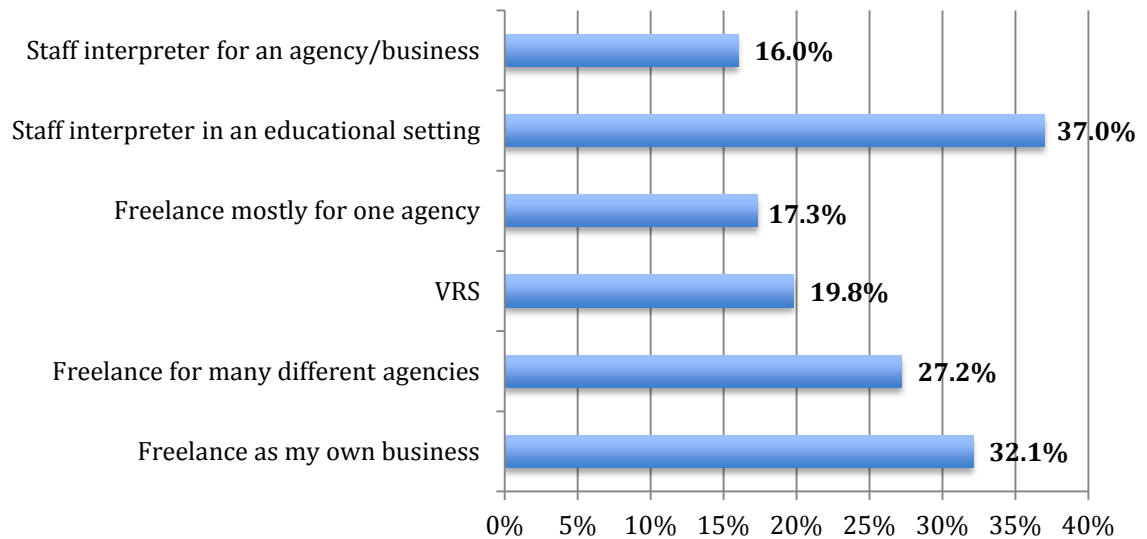


*Figure 8. How One Learned ASL*



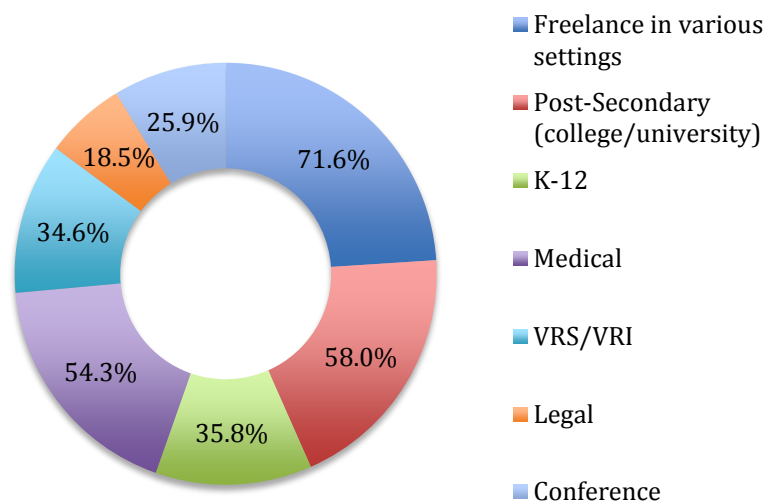
*Figure 9. How One Entered Profession*

The participants were able to select multiple items to indicate their types of employment. According to the data presented in Figure 10, the largest percentages of respondents selected that they work as Staff Interpreters in an Educational Setting, with the second highest percentage indicating Freelance as my own Business.



*Figure 10. Types of Employment*

Participants were able to select multiple items to indicate the settings where they work, as shown in Figure 11. Most participants (71.6%) indicated working Freelance in Various Settings with the next highest selections being Post-Secondary Settings (58.0%) and Medical (54.3%).



*Figure 11. Work Settings*



## Self-Care Characteristics

The self-care section of the survey consisted of open-ended questions to gather qualitative data. The participants were able to continue with the survey even if they did not respond to any of the self-care items. Five participants did not respond to the self-care items of the survey, which reduced the sample to 76 for this section. The data were coded into categories for analysis and are shown in Table 2. The most frequent types of Physical Self-Care indicated were Bodywork (48.1%) and Exercise (49.4%). For Mental/Emotional Self-Care, the highest percentage of respondents stated Interpersonal strategies (55.6%).

Table 2

### *Self-Care Categories with Frequencies and Percentages*

<u>Physical Self-Care</u>	<u>Frequency</u>	<u>Percent</u>
Bodywork	39	48.1%
Exercise	40	49.4%
Food	11	13.6%
Interpersonal	7	8.6%
Intrapersonal	17	21.0%
Rest	11	13.6%
Medical	3	3.7%
None	10	12.3%
<u>Mental/Emotional Self-Care</u>	<u>Frequency</u>	<u>Percent</u>
Boundaries	6	7.4%
Exercise	10	12.3%
Hobbies	16	19.8%
Interpersonal	45	55.6%
Intrapersonal	22	27.2%
Bodywork	3	37.0%
Food	1	1.2%
Rest	10	12.3%
Religion	15	18.5%
Medical	2	25.0%
None	10	12.3%

Of the respondents, about four in every 10 (43.2%) indicated a Physical Injury in the past 12 months and a similar amount (42.0%) reported a Mental/Emotional Hardship (see Table 3).

Table 3

*Reported Injuries and Hardships in the Past 12 Months*

<u>Physical Injury</u>	<u>Frequency</u>	<u>Percent</u>
No	46	56.8%
Yes	35	43.2%
<u>Mental/Emotional Hardship</u>	<u>Frequency</u>	<u>Percent</u>
No	47	58.0%
Yes	34	42.0%

### Reliability and Validity

The Job Satisfaction scale, job satisfaction subscales, and Maslach Burnout Inventory-Human Services Survey (MBI-HSS) subscales were entered into a Chronbach Alpha statistic. Tavakol and Dennick (2011) noted that the Chronbach Alpha statistic measures the internal consistency of a scale as a function of its reliability. Scores of .70 or higher suggest that a scale has an acceptable level of reliability (Chronbach, 1970).

Table 4

*Internal Consistency Values (Cronbach's  $\alpha$ )*

<u>Scale</u>	<u><math>\alpha</math></u>
Job Satisfaction Scale, Pay Subscale	0.597
Job Satisfaction Scale, Interpersonal Aspects Subscale	0.573
Job Satisfaction Scale, Autonomy Subscale	0.564
Job Satisfaction Scale, Demands Subscale	0.371
Job Satisfaction Scale, Control Subscale	0.438
Job Satisfaction Scale, Workload Subscale	0.230
Maslach Burnout Inventory: Depersonalization Subscale	0.869
Maslach Burnout Inventory: Personal Accomplishment Subscale	0.762
Maslach Burnout Inventory: Emotional Exhaustion Subscale	0.936
Job Satisfaction Scale (Dependent Variable)	0.846

Among the Job Satisfaction scales, the Pay subscale, Interpersonal Aspects subscale, Autonomy subscale, Demands subscale, Control subscale, and Workload subscale have poor reliability. The three Maslach Burnout Inventory subscales and the Job Satisfaction Scale (Dependent Variable) show acceptable reliability.

### **Means and Standard Deviations**

Job Satisfaction and subscales are continuous variables; Ritchey (2008) noted that for continuous variables, means and standard deviations are appropriate descriptive statistics to report. The variables in Table 5 were on a scale of one to five. One equates to a low level of the variable, five indicates a high level of the variable, and the midpoint of 3 indicates the middle of the scale. Six of the seven Job Satisfaction scales are over the midpoint of the scale; only the Pay subscale is under the midpoint of the scale. Overall Job Satisfaction for ASL/English interpreters in this survey was 4.29 of 5, well over the midpoint of 3.

Table 5

#### *Mean and Standard Deviation of Job Satisfaction and Subscales*

<u>Variable</u>	<u>M</u>	<u>SD</u>
Job Satisfaction Scale, Pay Subscale	2.00	1.19
Job Satisfaction Scale, Interpersonal Aspects Subscale	3.99	0.83
Job Satisfaction Scale, Autonomy Subscale	3.91	0.87
Job Satisfaction Scale, Demands Subscale	3.58	1.01
Job Satisfaction Scale, Control Subscale	4.21	0.74
Job Satisfaction Scale, Workload Subscale	3.68	1.05
Job Satisfaction Scale (Dependent Variable)	4.29	0.91

*Note:* n=81

The Maslach Burnout Inventory-Health Human Services (MBI-HSS) subcategories are continuous variables. The variables in Table 6 are on a scale of one to seven. One equates to a low level of the variable, seven indicates a high level of the

variable, with a midpoint of 4. Of the three MBI-HHS scales, only the Personal Accomplishment subscale is over the midpoint of the scale.

Table 6

*Mean and Standard Deviation of MBI-HHS*

<u>Variable</u>	<u>M</u>	<u>SD</u>
Maslach Burnout Inventory: Depersonalization Subscale	2.25	1.35
Maslach Burnout Inventory: Personal Accomplishment Subscale	5.71	1.04
Maslach Burnout Inventory: Emotional Exhaustion Subscale	3.14	1.41

*Note:* n=81

**Multiple Linear Regression Results, Method: Stepwise**

Ritchey (2008) noted multiple linear regression is the correct method to use when one has a single dependent variable (Job Satisfaction scale) that is continuous in nature and multiple independent variables that are either measured as continuous or categorical variables. These conditions are met in the current scenario. A Method: Stepwise algorithm was used to enter the various independent variables into the regression equation. The results show only five variables retained as statistically significant predictors of the dependent variable.

Table 7

*Multiple Linear Regression of Job Satisfaction Scale onto the Independent Variables*

<u>Variable</u>	<u>B</u>	<u>SE(B)</u>	<u>p</u>
Constant	1.380	0.444	0.003
Job Satisfaction Scale, Interpersonal Aspects Subscale	0.678	0.079	0.000
Maslach Burnout Inventory: Emotional Exhaustion Subscale	-0.170	0.046	0.000
Work Setting: Medical	0.403	0.121	0.001
Job Satisfaction Scale, Workload Subscale	0.132	0.058	0.025
Mental/Emotional Self-Care: Boundaries	0.473	0.227	0.040
<i>N</i>	55		
<i>F</i>	33.157		0.000
<i>R</i> <sup>2</sup>	0.689		

The Omnibus F-Test is statistically significant ( $F = 33.137$ ,  $df = 5, 75$ ;  $p = .000$ ). As such, decomposition of effects within the regression model can proceed (C. Bradley, personal communication, November 1, 2015). The coefficient of determination, also known as the  $R^2$  value, is .689. This value shows that 68.9% of the variation in job satisfaction can be explained by the five independent variables in the equation (C. Bradley, personal communication, November 1, 2015).

### **Hypothesis Analysis**

*Hypothesis 1: How One Learned ASL, Highest Level of Education, Credential level, Years of Professional Experience, How One Entered the Profession, and Graduation From an ITP are positively correlation with perceived Controls.*

None of the variables in Hypothesis 1 have a statistically significant correlation to perceived Controls. Hypothesis 1 is not supported.

*Hypothesis 2: The number of Hours Worked per Week, Work Settings, and Type of Employment has a direct correlation with Demands.*

Number of Hours Worked per Week and Type of Employment do not have a statistically significant correlation to perceived Demands. The Post-Secondary (college/university) setting is the only setting variable with a significant correlation to perceived Demands ( $r = .411$ ,  $p < .01$ ).

*Hypothesis 3: Frequency of Social Interactions with Deaf Community and with Other Interpreters has a negative correlation with Emotional Exhaustion and Depersonalization while also showing a positive correlation with Personal Accomplishment and Job Satisfaction.*

Frequency of Social Interactions with the Deaf community has a negative correlation with Depersonalization ( $r = -.276$ ,  $p < .01$ ). All other correlations in hypothesis 3 are not statistically significant.

*Hypothesis 4: Job Satisfaction correlates positively to Pay, Interpersonal Aspects, Autonomy, Controls and Personal Accomplishment, while it has a negative correlation to Workload, Demands, Depersonalization, and Emotional Exhaustion.*

Job satisfaction showed a positive significant statistical correlation to Interpersonal Aspects ( $r = .717$ ,  $p < .01$ ), Autonomy ( $r = .505$ ,  $p < .01$ ), Controls ( $r = .530$ ,  $p < .01$ ), Workload ( $r = .322$ ,  $p < .01$ ), and Personal Accomplishment ( $r = .370$ ,  $p < .01$ ). Job satisfaction has a negative correlation with Depersonalization ( $r = .529$ ,  $p < .01$ ) and Emotional Exhaustion ( $r = .545$ ,  $p < .01$ ). There was no statistically significant correlation between Job Satisfaction and Pay or Demands.

*Hypothesis 5: Physical and Mental/Emotional injury has a negative relationship to job satisfaction.*

Physical and Mental/Emotional injury does not have a statistically significant correlation with Job Satisfaction. Hypothesis 5 is not supported.

*Hypothesis 6: Type of Physical and Mental/Emotional self-care correlates with job satisfaction.*

Of the eight types of Physical self-care and 11 types of Mental/Emotional self-care, none showed a statistically significant impact on Job Satisfaction in the Pearson Bivariate Correlation matrix.

## Secondary Findings

Several variables in the Pearson Bivariate Correlation table show statistically significant correlations (see Appendix D). As an interpreter's Highest Level of Education increases, they are less likely to work as a Staff interpreter with an Agency ( $r = -.339$ ,  $p < .01$ ), are less satisfied with Pay ( $r = -.311$ ,  $p < .01$ ), and perceive more Demands in their work ( $r = .292$ ,  $p < .01$ ). Interpreters who frequently socialize with the Deaf community outside of work are also likely to socialize with other interpreters ( $r = .395$ ,  $p < .01$ ).

The method ASL/English interpreters learn ASL shows correlations with various aspects of their professional experience. This question was open-ended in the survey and was coded with respondents able to fall within both the Academic and Deaf Community subcategories. Interpreters who indicated learning ASL in an Academic setting are more likely to use Bodywork as a type of Physical Self-Care ( $r = .333$ ,  $p < .01$ ) and are less likely to indicate a high Workload ( $r = .286$ ,  $p < .01$ ). Interpreters who responded that they learned ASL from the Deaf community were more likely to have experienced a Mental/Emotional Injury in the past 12 months ( $r = .309$ ,  $p < .01$ ). Interpreters who are Heritage learners of ASL, with Deaf parent(s), are less likely to have Graduated From an ITP ( $r = -.348$ ,  $p < .01$ ) and are 43.2% more likely to have more Years of Professional Experience ( $p < .01$ ).

The Type of Employment an interpreter indicated showed several statistically significant correlations at the  $p < .01$  level. Respondents were able to select more than one item in this question. Interpreters who identified their type of work as VRS are 33.7% more likely to have a higher level of Depersonalization. The Staff Interpreter with an Agency variable has a negative correlation with Highest Level of Education ( $r = -.339$ )

and a positive correlation with Pay satisfaction ( $r = .356$ ). They are also less likely to use Interpersonal methods of Mental/Emotional Self-Care ( $r = .286$ ). Interpreters who selected Staff in an Educational Setting also showed a negative correlation with Depersonalization ( $r = -.234$ ).

The setting in which an interpreter works showed several statistically significant correlations at the  $p < .01$  level. Respondents were able to select more than one item in this question. Interpreters who Freelance also have a 35.2% probability to work in a University setting, a 35.7% probability of working in a Medical setting, and a 37.3% probability to work Conferences. Interpreters in a University setting show a positive correlation with Physical Injury related to interpreting in the past 12 months ( $r = .237$ ) and a positive correlation with level of Demands ( $r = .411$ ). Interpreters in a K-12 setting also selected a higher range of Hours Worked per Week ( $r = .366$ ). Interpreters who work in a Medical setting showed a positive correlation to Autonomy ( $r = .446$ ). Those who indicated they work in a VRS or VRI setting are also likely to describe Hobbies as a type of Mental/Emotional Self-Care ( $r = .291$ ), they identified a high level of Controls ( $r = .286$ ), and high Depersonalization ( $r = .296$ ). Legal interpreters show a positive correlation to Credential Level ( $r = .424$ ), also interpret Conferences ( $r = .516$ ), and Medical settings ( $r = .310$ ). Interpreters who indicated that they work in the Conference setting are likely to Freelance and work in the Legal setting as stated above, and they are likely to use Rest as a method of Mental/Emotional Self-Care ( $r = .292$ ).

The subscales of Job Satisfaction indicate several significant correlations with a  $p < .01$ . Satisfaction with Pay is negatively correlated with Highest Level of Education



( $r = -.311$ ) and Demands ( $r = .398$ ) while showing a positive correlation to working as a Staff interpreter at an Agency ( $r = .356$ ).

When analyzing the Interpersonal Aspects subscale, with increasing levels of Interpersonal Aspects, there is a 35.5% correlation with Autonomy, 50.5% correlation with Controls, -48.6% correlation with Depersonalization, 38.7% correlation with Personal Accomplishment, -39.1% correlation with Emotional Exhaustion, and a 71.7% correlation with Job Satisfaction.

Autonomy has a .446 correlation with interpreting in a Medical setting, a .526 correlation with Controls, a .399 correlation with Personal Accomplishment, a -.300 correlation with Emotional Exhaustion, and a .505 correlation with Job Satisfaction.

Increased Demands correlate with Highest Level of Education ( $r = .292$ ), interpreting in a University setting ( $r = .411$ ), having a Mental/Emotional Hardship in the past 12 months ( $r = .398$ ), Pay ( $r = -.398$ ), and Emotional Exhaustion ( $r = .316$ ).

As Controls increase, they have a positive correlation with interpreters who selected entering the profession by Interpreting for Deaf friends ( $r = .297$ ), working in a VRS/VRI setting ( $r = .286$ ), Interpersonal Aspects ( $r = .505$ ), Autonomy ( $r = .526$ ), Workload ( $r = .289$ ), Personal Accomplishment ( $r = .223$ ), and Job Satisfaction ( $r = .530$ ).

Workload has a negative correlation with learning ASL in an Academic setting ( $r = -.286$ ), a positive correlation to Controls ( $r = .289$ ), and a positive correlation to Job Satisfaction ( $r = .322$ ).

Statistically significant correlations with the three subscales of burnout: Depersonalization, Personal Accomplishment, and Emotional Exhaustion each have

several correlations within the  $p < .01$  range. Depersonalization is positively correlated with the VRS variable of Type of Employment ( $r = .337$ ) as well as the VRS/VRI Work Setting ( $r = .296$ ). Depersonalization is also negatively correlated with the Interpersonal Aspects subscale ( $r = -.486$ ) and with Job Satisfaction ( $r = -.529$ ). Personal Accomplishment is positively correlated with the Interpreting for Friends selection of How One Entered the Profession ( $r = .328$ ), the Interpersonal Aspects subscale ( $r = .387$ ), the Autonomy subscale ( $r = .399$ ), and Job Satisfaction ( $r = .370$ ). Emotional Exhaustion has a positive correlation with the None selection of Physical Self-Care ( $r = .224$ ) and the Demands subscale ( $r = .316$ ). It has a negative correlation to the Pay subscale ( $r = -.318$ ), the Interpersonal Aspects subscale ( $r = -.391$ ), the Autonomy subscale ( $r = -.300$ ), and Job Satisfaction ( $r = -.545$ ).

Job Satisfaction had several statistically significant correlations within the  $p < .01$  range as shown in the Table 8.

Table 8

*Job Satisfaction Statistically Significant Bivariate Correlates*

<u>Variable Name</u>	<u>Pearson's r</u>
Job Satisfaction Scale, Interpersonal Aspects Subscale	0.717
Job Satisfaction Scale, Autonomy Subscale	0.505
Job Satisfaction Scale, Control Subscale	0.530
Job Satisfaction Scale, Workload Subscale	0.322
Maslach Burnout Inventory: Depersonalization Subscale	-0.529
Maslach Burnout Inventory: Personal Accomplishment Subscale	0.370
Maslach Burnout Inventory: Emotional Exhaustion Subscale	-0.545

Note: All values have a  $p < .01$

## CHAPTER 5: DISCUSSION

### **Job Satisfaction**

Participants in this survey reported a high level of Job Satisfaction, 4.29 in a scale of 1 to 5 (see Table 5). This high reported satisfaction could be due to a variety of reasons. The profession of American Sign Language (ASL)/English interpreting has a variety of niches in which to work. This may allow interpreters to select work only in the areas of their preference, thereby increasing their satisfaction. Within the data set used for this study, only participants with five or more years of experience were included in the analysis. This may have impacted the Job Satisfaction results since people who are not satisfied with their job may have switched professions before working as an ASL/English interpreter for five years. Inversely, the job of an interpreter is challenging, and it could be that only interpreters who have high levels of satisfaction have chosen to stay in the profession for five or more years.

The aspects of an ASL/English interpreter's professional practice that appear to have the biggest impact on Job Satisfaction, according to the multiple linear regression, are Emotional Exhaustion (negatively related), the Interpersonal Aspects subscale of job satisfaction, working in a Medical setting, having a higher Workload and practicing Boundaries as Mental/Emotional Self-Care (positively related). An ASL/English interpreter has a 68.8% chance of having high Job Satisfaction if they keep their Emotional Exhaustion low, get along well with colleagues and clients, interpret in a Medical setting, keep their schedule full, and practice setting boundaries.

According to the Pearson Bivariate Correlation, the Interpersonal job satisfaction subscale has a 71.7% correlation with Job Satisfaction, which is a strong relationship. The Autonomy and Control subscales have around a 50% correlation with Job satisfaction, indicating that as an interpreter's Autonomy and Controls increase, so does their Job Satisfaction. The two aspects that have a negative correlation with Job Satisfaction are Depersonalization and Emotional Exhaustion, which is logical as these are indicators of burnout.

The results of the multiple linear regression analysis are different than the Pearson Bivariate Correlation results because the bivariate correlation is a set of many tests that include only two variables at a time. The multiple linear regression analysis is a multivariate statistical technique that looks at the relationship among multiple independent variables when seeking to understand how those variables predict the value of a dependent variable. Within a multiple linear regression, the algorithm takes into account the fact that multiple independent variables will sometimes be correlated and can impact the nature of the relationships between any given independent variable and the dependent variable. Therefore, it is the case that a bivariate correlation in a Pearson's correlation table may be statistically significant, but the significant bivariate correlation may be washed out when one considers the totality of all correlations among independent variables (C. Bradley, personal communication, November 1, 2015). This means that if one wants to increase or decrease their level of one particular variable, they may be able to identify the other influential variables through the Pearson Correlation. However, if one wants to identify which factors may cumulatively have the strongest impact on a variable, then a multiple linear regression may be a better predictor.

## **Background Characteristics**

When looking at the Pearson Correlation matrix for the background characteristics of American Sign Language (ASL)/English interpreters, there are several significant results that may be interrelated. Graduation from an Interpreter Training Program (ITP) has a negative correlation with Years of Professional Experience, which falls in line with the knowledge that ITPs were developed after the need for interpreting as a profession was identified and that ITPs are still developing (Ball, 2013).

Additionally, according to Williamson's (2015) study of Deaf-parented interpreters, the plurality of her respondents started professionally interpreting at the age of 18 (p. 41). ITPs are offered through colleges and universities. This means that people who use ITPs as a method of entry into the interpreting profession are just starting to take classes at the same age that their heritage signing peers are starting to work professionally.

Table 1 indicates most ITP graduates received an Associate's degree from their program. However more than half of the participants of this study selected a Bachelor's degree (37.0%) or a Master's degree (32.1%) as their Highest Level of Education. This indicates that many of the respondents' Highest Level of Education is not their ITP, but may be from another field of study. This may be because most ITPs are offered at a community college level. According to an online search of the Registry of Interpreters for the Deaf's (RID) Interpreter Education Program database, there are 48 entries for Certificate programs, 79 entries for Associate degree programs, 41 entries for Bachelor degree programs and four entries for Graduate degree programs. The interpreters in this study may also have chosen to study an alternative field as a supplemental, specialized

skill set for interpreting in that field, they may have achieved their advanced degrees before deciding to become an interpreter, or for another reason unexplored by this survey.

Participants who selected Video Relay Service (VRS) and Video Remote Interpreting (VRI) as their Type of Employment and/or Work Setting show a significant correlation to Depersonalization. Depersonalization is one of the factors that indicate burnout, which makes this result significant to the field of VRS and VRI interpreting. Those who selected VRS/VRI as a Work Setting also indicated a positive correlation with Controls. Interestingly, Controls also has a positive correlation to Job Satisfaction. This presents a unique combination as Controls increase Job Satisfaction and Depersonalization decreases Job Satisfaction. It may be that the ability to literally disconnect after a VRS/VRI call may be an increased Control that also increases Depersonalization, since the clients are not physically near the interpreter.

After coding the open question of Credential Level, eight respondents were in the “None” category, which is significant when taking into account the respondents have been working professionally for at least five years. The responses were coded as None when the participant did not respond to the question, had indicated passing a written portion of a credentialing test but not the performance, or indicated a language fluency test, which is different than an interpreting test. The frequency shows almost 10% of participants have been working for five years or more without interpreting credentials. Each state is responsible for regulating their ASL/English interpreter standards and currently approximately 30 states have any type of regulation (Schafer, 2015). “This is an issue of great importance considering the impact their decisions can have on the state of the profession as well as the quality of service consumers receive” (Schafer, 2015, p. 48).

## **Role Strain**

For the purpose of this study, the term role strain was defined as a situation or event involving multiple, conflicting responsibilities, unexpected situational requirements, and/or ethical dilemmas (known as Demands) as well as the resources (Controls) to manage those Demands. The respondents to this study identified a higher level of Controls (4.21) than Demands (3.58) according to the means in Table 5. This could be due to the number of years of experience of the participants. As one works in the field of interpreting, they may be developing more strategies for their Control options. Also, with experience counted as years in the field, one may also gain experience in a variety of settings, which can aid in the development of Controls. As Controls have a strong statistical bivariate correlation to Job Satisfaction ( $r = .530, p < .01$ ), this is in line with both the theory of role strain and the data that the mean for Job Satisfaction within this data set is a high 4.29 in a range of one to five.

According to the bivariate correlations of this data set, Controls increase when ASL/English interpreters have good relationships with their peers, as gauged by the Interpersonal Aspects subscale; have a high level of decision-making latitude (measured by the Autonomy subscale); a high Workload; or work in a VRS/VRI setting. Working in a VRS/VRI setting may increase controls as the environment of the work stations tend to gather many interpreters in one area, thereby providing resources to individual interpreters in the setting. Positive relationships with colleagues can increase Controls and decision latitude if colleagues work together as a team to manage various aspects of their environment. Due to the overlap in correlations responses, it is not possible to know

which independent variable in a bivariate correlation has the most impact on another variable.

There is a positive correlation between Demands and Highest Level of Education and a negative correlation between Highest Level of Education and the Agency Staff Type of Employment. This may mean that interpreters who do not work as Staff for Agencies may experience more unknowns and conflicting responsibilities within their professional interpreting experience. Following the same vein, interpreters who work as Agency Staff may receive standardized information to prepare for assignments and/or may have roles more clearly defined by their agency. Another reason for Demands to increase as Highest Level of Education increases is that interpreters with advanced diplomas may feel more comfortable expanding their arenas of interpreting. Broadening one's interpreting repertoire may increase the types of Demands encountered by the interpreter.

There are significant correlations among increased Demands and increased Physical Injury ( $r = .275$ ,  $p < .05$ ) as well as Mental/Emotional hardship ( $r = .398$ ,  $p < .01$ ) in the past 12 months. Due to the nature of bivariate correlations, it is not possible to know if interpreters who perceive higher Demands are more susceptible to injury and hardship, or if those who have experienced injury and hardship are more aware and sensitive to Demands.

### **Self-Care**

A plurality of ASL/English interpreters indicated Bodywork and/or Exercise as their Physical Self-Care. Increased Exercise had a negative correlation with Physical Injury, which may indicate that is an effective preventative measure. For



Mental/Emotional Self-Care, the highest response rate was for Interpersonal methods of self-care. Interpersonal Mental/Emotional Self-Care has a negative correlation to Depersonalization, which in turn has a negative correlation to Job Satisfaction. Of the participants, the response rate was more than 40% for experiencing a Physical Injury, and a similar percentage indicated they experienced a Mental/Emotional Hardship in the past 12 months. The Physical Injury percentages are similar to those of Zenizo, which shows consistency of results within the profession (2013). In spite of the high percentage of injuries and hardships, Job Satisfaction level was high, indicating that injuries and hardships are not reliable predictors of satisfaction. Potentially, interpreters may become desensitized to injury and hardship as a byproduct of the profession, which could be the reason it does not affect their level of satisfaction. “When I started interpreting 30 years ago, I expected to work all day and I expected to work alone” (B. Sofinski, Personal Communication, December 1, 2015). This is one example of how ASL/English interpreter views may downplay demanding work environments and, by extension, injuries and hardships.

## **Burnout**

Information regarding burnout was collected through the Maslach Burnout Inventory-Human Services Survey (MBI-HSS), which has three subscales: Depersonalization, Personal Accomplishment, and Emotional Exhaustion (Maslach & Jackson, 1996). The standard key for this assessment tabulates the total responses per subcategory as a sum of responses to individual questions. However, for this study, the results were averaged per participant so that the variables would be continuous and could be used in a multiple linear regression and a bivariate correlation. Depersonalization and

Emotional Exhaustion are negative indicators of Job Satisfaction, while Personal Accomplishment is a positive indicator according to their bivariate correlations. This correlation can be interpreted to mean that increasing positive indicators and decreasing negative indicators will ultimately increase Job Satisfaction.

Depersonalization and Emotional Exhaustion both have a negative correlation to Job Satisfaction, which may mean it would be beneficial to an interpreter to decrease both aspects in their professional life. According to bivariate correlations, Depersonalization decreases when working as Staff in an Educational setting, Frequently Socializing with the Deaf Community, using Interpersonal methods of Mental/Emotional Self-Care, and having a high Interpersonal Aspects subscale of Job Satisfaction. Depersonalization increases in a VRS/VRI setting, which is a setting an interpreter may avoid if they are concerned about their level of Depersonalization. Emotional Exhaustion decreases with Freelance interpreting, including Freelancing with an Agency, using Intrapersonal methods of Physical Self-Care, having a higher satisfaction with Pay, having more Autonomy, and a high Interpersonal Aspects subscale of Job Satisfaction. Emotional Exhaustion increases when one does not practice Physical Self-Care and with high Demands. Knowing the correlations with these burnout subscales can aid an interpreter in modifying their practice to decrease these aspects and increase Job Satisfaction.

Personal Accomplishment, which is a negative indicator of burnout in the MBI-HSS inventory, has a positive correlation with Job Satisfaction within the data set of this study. When focusing on modifying one's Personal Accomplishment, it is beneficial to note that those who enter the profession through an ITP are more likely to have a lower

level of Personal Accomplishment while those who enter the profession by interpreting for Deaf friends have higher levels. Other variables that may increase Personal Accomplishment when increased are good relationships with colleagues and clients, Autonomy, and increased Controls. There may be some overlap between Autonomy and higher Controls as correlates of Personal Accomplishment. When one has more decision-making latitude, they may also have the ability to implement more Controls in their work. Ultimately, modifying these variables may increase feelings of Personal Accomplishment as well as increase Job Satisfaction.

### **Hypotheses**

Hypothesis 1 predicted that different background characteristics related to education and experience had an impact on the level of Controls identified in the data. Hypothesis one was not supported, meaning that one's education and experience may not influence an interpreter's Controls, and by extension, role strain. This may be due to an experienced interpreter's willingness to venture into new work environments. Continually experiencing varying work environments may mean the interpreter is also encountering new demands, resulting in a consistent level of role strain.

Hypothesis 2 predicted that variables related to work choices, such as Number of Hours or Work Settings, had an impact on Demands. The only work choice variable that had a statistically significant correlation with Demands was the Post-Secondary setting with increased Demands in that work setting. Post-Secondary settings may have higher Demands due to scheduling, accessibility of materials, split classes, or another unforeseen cause. Schedules in post-secondary settings vary among daily classes, weekly classes, and multiple meetings per week. The same interpreter may or may not cover all of the

class meetings, which would impact the consistency of the interpreter and their preparedness. Portions of post-secondary classes may have asynchronous components hosted through an online platform. If the interpreter does not have access to this online platform, they may experience a higher level of Demands as it would be difficult to keep up with the content of the class. Classes may also be split in the Post-Secondary setting, meaning there are separate lecture and lab classes. If the interpreters are not consistently covering both lecture and lab, they may have the same Demands as those who do not cover each meeting of a class that meets multiple times a week. The Post-Secondary setting also had a significant correlation to Highest Level of Education, which may mean that those interpreters have more situational awareness from higher education and are more aware of Demands, not necessarily that the Post-Secondary setting contains higher Demands.

Hypothesis 3 examined correlations between social interactions and burnout subscales and Job Satisfaction. One correlation was statistically significant: as an interpreter socializes more frequently with Deaf community members, the Depersonalization subscale of burnout decreases. This may be due to interactions with an interpreter's clients, which allow the interpreter to know the client on a deeper level and decrease Depersonalization. Socialization with the Deaf community may also increase cultural competence and thus lead to a feeling of connection with members of the community.

The fourth Hypothesis looked at burnout and the job satisfaction subscales in relation to Job Satisfaction. Interpersonal Aspects, Autonomy, Controls, Workload, and Personal Accomplishment all have positive correlation to Job Satisfaction. It is notable

that as Workload increases, Job Satisfaction increases. This implies that interpreters are more satisfied when they are working. This satisfaction may be due to the financial stability of working more hours. However, it should be noted that the Chronbach Alpha reliability for Workload is low, as shown in Table 4, which reduces the dependability of the correlation. Job Satisfaction had a negative correlation to Depersonalization and Emotional Exhaustion as predicted. Demands did not have a statistically significant correlation with Job Satisfaction, which may be due to the high level of Controls interpreters identified. Karasek's (1979) research suggested that a person with both high Demands and high Controls will experience increased Job Satisfaction. The data in this study are in line with Karasek's (1979) research. The high Job Satisfaction reported in this study show similar results to Heller et al, who reported high job satisfaction within their data as well as high demands (1986).

Hypotheses 5 and 6 were related to self-care and injuries in the past 12 months and their impact on Job Satisfaction. Neither the type of Physical or Mental/Emotional Self-Care an interpreter practiced nor the incidence of a Physical Injury or Mental/Emotional Hardship in the past 12 months had a significant impact on Job Satisfaction. They did have an impact on other aspects of an interpreter's professional experience as noted in the self-care subcategory of this chapter. One possible reason self-care and injuries do not have a strong impact on Job Satisfaction is that the profession of ASL/English interpreting is customizable. Interpreters have a variety of arenas for where they work and may be able to switch if a particular setting causes injury.

Sixty variables were included in this survey with the ultimate focus on Job Satisfaction. Results from the data analysis may be able to guide novice and experienced

interpreters in their ability to increase job satisfaction, decrease aspects of burnout, and prevent physical and mental/emotional injuries. The Results and Discussion sections of this thesis include background characteristics that can be used to provide a summary of the profession to students and those considering pursuit of a career in ASL/English interpreting.

## CHAPTER 6: CONCLUSION

The findings of this mixed-methods study of United States American Sign Language (ASL)/English interpreters explore the relationship among job satisfaction, background characteristics, self-care, and burnout with the overall question being “Which aspects of an ASL/English interpreter’s practice have the greatest impact on job satisfaction?” The secondary goal of this research was to provide a summary of the profession for new interpreters or those interested in becoming an interpreter. This may be one of the first studies to incorporate background characteristics, role strain, self-care, burnout, and job satisfaction for ASL/English interpreters.

Through a multiple regression analysis, this study found that an interpreter has a 68.8% chance of increasing their Job Satisfaction if they have high Interpersonal Aspects of work through having good relationships with colleagues and clients, work in a Medical setting, have a high Workload, practice setting Boundaries and decrease their Emotional Exhaustion. Also, a bivariate analysis showed Interpersonal Aspects had a 77.7% positive relationship with Job Satisfaction, and Emotional Exhaustion had a 54.4% negative relationship. This shows, through two different statistical models, that an interpreter’s relationship with colleagues and clients, in addition to reducing Emotional Exhaustion, have the strongest impact on Job Satisfaction.

An analysis of the variables in this study shows that interpreters within Video Relay Service (VRS) and Video Remote Interpreting (VRI) settings have a higher level of Depersonalization, which is a subscale of burnout. However, those same interpreters

do not have a statistically lower Job Satisfaction level. The same interpreters also report a high level of Controls, which may mitigate the risk of burnout from Depersonalization.

Interpreters reported a higher level of Controls than Demands, which indicate a low level of role strain and a high level of Job Satisfaction (Dean & Pollard, 2013; Karasek, 1979). Demands were reported higher in University Settings, for those with higher levels of education, and for those who work with agencies. Interpreters who have experienced a Physical Injury or Mental/Emotional Hardship indicated a higher level of Demands. It is unclear whether they encounter higher Demands and were injured as a result, or if they are more sensitive to Demands due to an injury.

Almost half of the participants indicated a Physical Injury, and almost half reported a Mental/Emotional Hardship in the past twelve months. According to the Professional Standards Committee (2007), “one out of every four interpreters experiences some type of [Repetitive Strain Injury] in the first two years of work” (p. 2). The data collected through this study show a higher percentage of injury than the 2007 Standard Practice Paper, which may mean that one is more prone to injuries the longer one works, or that injuries sustained at the beginning of one’s career can be cumulative. Exercise as Physical Self-Care was shown to have a correlation with decreased Physical Injury. There were no Mental/Emotional Self-Care bivariate correlations that were statistically significant with Mental/Emotional Hardship. The only mitigating factors for Mental/Emotional Hardship were How One Entered the Profession and Years of Experience. Interpreters who have worked for a longer period of time are reporting fewer incidences of Mental/Emotional Hardship, like vicarious trauma and compassion fatigue, in the previous 12 months.



Burnout can be mitigated by increasing an interpreter's socialization with the Deaf community, using both Interpersonal and Intrapersonal methods of self-care, working as Staff in an Educational setting, Freelancing, having more Autonomy and Controls, and having a good relationship with colleagues and clients. If an interpreter reduces time working in a VRS or VRI setting and decreases Demands, they may benefit by having higher Job Satisfaction. Interpersonal methods of self-care, as suggested for increased job satisfaction, include counseling, talking with friends and family, and debriefing with other interpreters within the limits of confidentiality. Debriefing with other interpreters has been suggested through previous research as a method of reducing burnout and increasing job satisfaction (Dean & Pollard, 2013).

### **Recommendations for Further Study**

The results of this study may benefit the field of American Sign Language (ASL)/English interpreting by providing a list of suggestions to increase job satisfaction, decrease burnout, and decrease injuries, both physical and mental/emotional. Within the data were trends for which further research may benefit the profession. First, it is notable that 9.9%, or eight respondents, have been professionally interpreting for more than five years without interpreting credentials. Geographic information was not gathered in this survey, but it may be beneficial to further study and collect information on ASL/English interpreter professional work experience, credentials, and licensure information in their geographic area to identify the density of non-credentialed interpreters in each state. It would be beneficial to also know in which work settings the non-credentialed interpreters practice and the implications of hiring a non-credentialed interpreter for those settings.

Another area of further research suggested by this study is in regard to the level of demands indicated by interpreters in a Post-Secondary setting. These interpreters indicated a higher level of Demands than interpreters in other settings as well as higher levels of education. This study does not differentiate Demands perceived due to an increased awareness of Demands in general, or due to the setting actually having more Demands. A study analyzing the Post-Secondary setting compared to other settings would need to be conducted to determine the cause and effect relationship among Highest Level of Education, Demands, and Post-Secondary setting.

Physical Injuries and Mental/Emotional Hardships are other areas that may benefit the profession to further study. Forty percent of the participants in this study reported an injury and/or hardship in the last 12 months, yet Job Satisfaction levels were high within the data set. Further research into ASL/English interpreter's mindsets around injuries and hardships may lend insight into the reason behind high satisfaction regardless of the mental and physical consequences frequently encountered within the profession.

Also in relation to Mental/Emotional Hardship, interpreters who identified as having learned ASL, at least in part, through the Deaf community also had a 31% chance of experiencing a hardship in the previous 12 months ( $p < .01$ ). Further research is suggested into the correlation between these two variables. Identifying the reason(s) behind this correlation may aid interpreters in reducing the frequency of Mental/Emotional Hardships.

Interpreters who identified as working with an interpreting agency indicated higher levels of satisfaction with Pay than other interpreters, while having lower levels of Demands and lower levels of education. A study on interpreters within agency settings

could help identify some of the reasons Demands are perceived as lower and Pay satisfaction is higher. The Pay subscale of job satisfaction was the only subscale that had an average below the mean within the general data set, which indicates lower than average satisfaction. This makes the increased satisfaction with Pay for those who work with an Agency notable.

This study of ASL/English interpreters in the United States contributes to a better picture of who they are, their self-care strategies, work choices, burnout triggers, and level of job satisfaction. The results of this study can be used to educate novice and experienced interpreters alike in strategies to improve their satisfaction with their professional practice as well as provide a description of the profession to those who are interested in learning more about ASL/English interpreters.

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## APPENDIX A: ASL/ENGLISH INTERPRETER QUESTIONNAIRE

### 1. Gender

*Mark only one oval.*

- ☐ Male
- ☐ Female

### 2. Ethnic Origin

*Mark only one oval.*

- ☐ Hispanic/Latino(a)
- ☐ African American/Black
- ☐ American Indian/Native American
- ☐ Euro-American/White
- ☐ Asian American/Pacific Islander
- ☐ Other
- ☐ Prefer not to answer

### 3. Indicate the highest degree you have completed

*Mark only one oval.*

- ☐ High School
- ☐ Certificate of Completion
- ☐ Associate's
- ☐ Bachelor's
- ☐ Master's
- ☐ Doctorate

### 4. Did you graduate from an Interpreter Training Program?

*Mark only one oval.*

- ☐ No
- ☐ Yes, Certificate of Completion
- ☐ Yes, Associate's
- ☐ Yes, Bachelor's
- ☐ Yes, Master's
- ☐ Yes, Doctorate

### 5. What level(s) of interpreter certification do you have?

### 6. How many years have you been interpreting professionally?

*Mark only one oval.*

- ☐ 0-4
- ☐ 5-14
- ☐ 15-25
- ☐ 26+

7. How did you learn American Sign Language?

8. How did you learn English?

9. At what age did you start learning American Sign Language?

*Mark only one oval.*

- ☐ Less than 5 years old
- ☐ 5-18 years old
- ☐ 18+ years old

10. At what age did you start learning English?

*Mark only one oval.*

- ☐ Less than 5 years old
- ☐ 5-18 years old
- ☐ 18+ years old

11. How did you enter the interpreting profession?

*Check all that apply.*

- ☐ Interpreting for Deaf family
- ☐ Interpreting for Deaf friends
- ☐ Training program
- ☐ Mentorship
- ☐ Other:

12. How do you describe your work as an interpreter?

*Check all that apply.*

- ☐ Staff Interpreter for an agency/business
- ☐ Freelance mostly for one agency
- ☐ Freelance for many different agencies
- ☐ Freelance as my own business
- ☐ Staff interpreter in an educational setting
- ☐ Other:

13. How many hours a week do you typically interpret?

*Mark only one oval.*

- ☐ 0-15
- ☐ 16-29
- ☐ 30-40
- ☐ 41+

14. In what settings do you interpret?

*Check all that apply.*

- ☐ Freelance in various settings
- ☐ Post-Secondary (college/university)
- ☐ K-12
- ☐ Medical
- ☐ Legal
- ☐ VRS/VRI
- ☐ Conference
- ☐ Other:

15. How often do you have contact with members of the Deaf community outside of work?

*Mark only one oval.*

- ☐ More than once a week
- ☐ Once a week
- ☐ A few times a month
- ☐ Once a month
- ☐ A few times a year
- ☐ Other:

16. How often do you have contact with other ASL/English interpreters outside of work?

*Mark only one oval.*

- ☐ More than once a week
- ☐ Once a week
- ☐ A few times a month
- ☐ Once a month
- ☐ A few times a year
- ☐ Other:

### **Self-Care**

If you feel you would benefit from counseling services relating to a past mental or emotional hardship, please seek help. <http://www.nationalcounsellingsociety.org/>

17. What types of physical self-care do you practice?

18. What types of mental/emotional self-care do you practice?

19. In the past 12 months, have you had any physical ailments or injuries related to your work as an ASL/English interpreter? If so, please indicate them below.

20. In the past 12 months, have you had any mental or emotional hardships related to your work as an ASL/English interpreter? If so, please indicate them below.

21. What additional information would you like to share with me about self-care?

## Job Satisfaction

This page contains a number of statements with which some people agree and others disagree. Please indicate how much you personally agree or disagree with these statements.

22. My job is usually interesting.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

23. On my job, I often encounter situations with no clear "right" answer.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

24. I am satisfied with my job.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

25. I like my job better than the average worker does.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

26. I feel I am being paid a fair amount for the work I do.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree



27. I find interpreting enjoyable because of the clients with whom I work.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

28. I find interpreting enjoyable because of the other interpreters with whom I work.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

29. There is little opportunity for promotion on my job.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

30. I frequently find that work assignments are not fully explained.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

31. Raises are few and far between.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

32. It seems that my friends are more interested in their jobs.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

33. There is not enough work available in my area.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

34. I regret the choice to be an ASL/English interpreter.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

35. I frequently have to turn down assignments because I am already booked.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

36. I receive adequate support from my coworkers.

For the purposes of this study, coworker is defined as any other individual person with whom you work and is not limited to other interpreters.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

37. I am able to implement strategies while working to manage my workload.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

38. I frequently feel that I successfully work without direct supervision.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

39. I decide with whom I work.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

40. I do not feel that I have adequate training to address the conflicting requirements of my role.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

41. I am confident in my ethical decision making process.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

42. My job frequently leaves me with little time to get things done.  
This includes both work and personal tasks.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

43. I have independence in decision-making at my job.

*Mark only one oval.*

- ☐ 1 Agree
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 Disagree

### **Maslach Burnout Inventory–Human Services Survey (MBI)**

The purpose of this survey is to discover how various persons in the human services or helping professions view their jobs and the people with whom they work closely.

MBI-Human Services Survey (MBI-HSS): The original measure that was designed for professionals in the human services. Copyright © 1981 by Christina Maslach & Susan E. Jackson.

Published by Mind Garden, Inc. [www.mindgarden.com](http://www.mindgarden.com)

*MBI-HSS questions are not included in Appendix due to Copyright restrictions.*

## APPENDIX B: CONSENT FORM

Dear Colleague,

I am a master's degree student at Western Oregon University in the College of Education under the supervision of Professor Vicki Darden. I am conducting a research study to find correlates among job satisfaction, role conflict, burnout and self-care for American Sign Language (ASL)/English Interpreters in the United States

Participation in the survey will serve as your consent. The survey will take approximately 15-20 minutes. You must be 18 or older to participate. Your participation in this study is voluntary. There is no penalty if you choose not to participate or to withdraw from the study at any time.

There are no foreseeable risks or discomforts to your participation. The data will be used to provide a current survey of job satisfaction, role conflict, burnout and self-care among working ASL/English interpreters. The results may be used in interpreter education classes to provide an overview of the ASL/English interpreter profession and will also provide more evidence on best practices to mitigate burnout among ASL/English interpreters.

The online survey does not allow me to identify participants and your responses will remain anonymous. Should you choose to provide any identifiable information, that information will remain confidential. I will remove any personal identifiers after coding is completed in order to maintain your confidentiality. The results of this study will be used in my master's thesis and may be used in reports, presentations, or publications but your name will not be known or used.

If you have any questions concerning the research study, please contact me by phone at (804)339-3306 or via email at: [chumphrey14@mail.wou.edu](mailto:chumphrey14@mail.wou.edu) or my graduate advisor Professor Vicki Darden at [dardenv@wou.edu](mailto:dardenv@wou.edu).

This study has been reviewed and approved by the Western Oregon University Institutional Review Board (IRB). If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the WOU Institutional Review Board at (503) 838-9200 or [irb@wou.edu](mailto:irb@wou.edu).

I invite you to participate in this study by filling out the questionnaire at the following link:

*ASL/English Interpreter Questionnaire*

Thank you,

Carrie N.H. Humphrey

Masters student, College of Education

Western Oregon University

## APPENDIX C: VARIABLES

<u>60 Variables of the Bivariate Pearson Correlation</u>	<u>Question Number</u>
1. Gender	1
2. Ethnic Origin: White versus other	2
3. Highest Level of Education	3
4. Graduation From an Interpreter Training Program	4
5. Credential Level	5
6. Years of Professional Experience	6
7. How One Learned American Sign Language: Academic setting	7
8. How One Learned American Sign Language: Deaf community	7
9. How One Learned American Sign Language: Heritage signer	7
10. How One Entered the Profession: Training program	11
11. How One Entered the Profession: Mentorship	11
12. How One Entered the Profession: Interpreting for D/deaf friends	11
13. How One Entered the Profession: Interpreting for D/deaf family	11
14. Type of Employment: Freelance as my own business	12
15. Type of Employment: Freelance for many different agencies	12
16. Type of Employment: VRS	12
17. Type of Employment: Freelance mostly for one agency	12
18. Type of Employment: Staff interpreter in an educational setting	12
19. Type of Employment: Staff interpreted for an agency/business	12
20. Hours Worked per Week	13
21. Work Setting: Freelance in various settings	14
22. Work Setting: Post-Secondary (college/university)	14
23. Work Setting: K-12	14
24. Work Setting: Medical	14
25. Work Setting: VRS/VRI	14
26. Work Setting: Legal	14
27. Work Setting: Conference	14
28. Frequency of Social Interactions with Deaf Community	15
29. Frequency of Social Interactions with Other interpreters	16
30. Physical Self-Care: Bodywork	17
31. Physical Self-Care: Exercise	17
32. Physical Self-Care: Food	17
33. Physical Self-Care: Interpersonal	17
34. Physical Self-Care: Intrapersonal	17

35. Physical Self-Care: Rest	17
36. Physical Self-Care: Medical	17
37. Physical Self-Care: None	17
38. Mental/Emotional Self-Care: Boundaries	18
39. Mental/Emotional Self-Care: Exercise	18
40. Mental/Emotional Self-Care: Hobbies	18
41. Mental/Emotional Self-Care: Interpersonal	18
42. Mental/Emotional Self-Care: Intrapersonal	18
43. Mental/Emotional Self-Care: Bodywork	18
44. Mental/Emotional Self-Care: Food	18
45. Mental/Emotional Self-Care: Rest	18
46. Mental/Emotional Self-Care: Religion	18
47. Mental/Emotional Self-Care: Medical	18
48. Mental/Emotional Self-Care: None	18
49. Physical Injury	19
50. Mental/Emotional Hardship	20
51. Job Satisfaction Scale, Pay Subscale	29, 31
52. Job Satisfaction Scale, Interpersonal Aspects Subscale	27, 28, 36
53. Job Satisfaction Scale, Work Autonomy Subscale	38, 43, 39
54. Job Satisfaction Scale, Demands Subscale	23, 30
55. Job Satisfaction Scale, Control Subscale	37, 41
56. Job Satisfaction Scale, Workload Subscale	33, 35
57. Maslach Burnout Inventory: Depersonalization Subscale	-
58. Maslach Burnout Inventory: Personal Accomplishment Subscale	-
59. Maslach Burnout Inventory: Emotional Exhaustion Subscale	-
60. Job Satisfaction Scale, Dependent Variable	22, 24, 25, 32, 34

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# APPENDIX D: BIVARIATE PEARSON CORRELATION RESULTS

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1	1.0																														
2	.037	1.0																													
3	.259*	-.091	1.0																												
4	.166	-.176	.228*	1.0																											
5	-.066	-.074	-.031	.141	1.0																										
6	.027	.035	.102	.388*	.001	1.0																									
7	-.178	-.070	.186	.437*	-.111	.378*	1.0																								
8	-.029	.168	-.166	-.111	.044	-.191	-.158	1.0																							
9	.080	-.037	.061	.348*	.066	.432**	.449*	.359*	1.0																						
10	.084	.033	-.055	.561**	.037	.377*	.443**	-.164	.379*	1.0																					
11	-.229*	-.014	-.127	-.169	.057	-.111	-.052	.114	-.013	.025	1.0																				
12	.067	.145	-.026	.301*	-.155	.213	-.169	.138	-.067	.355*	.066	1.0																			
13	.080	-.037	.021	.348*	-.042	.432**	.345**	.262*	.820**	.379**	-.013	.039	1.0																		
14	.093	.097	.118	-.090	-.042	.082	-.036	-.003	.007	-.093	-.124	-.182	.007	1.0																	
15	.067	-.024	.115	.021	-.155	-.135	.077	.081	-.067	.167	.138	-.186	-.067	.234*	1.0																
16	-.096	-.002	-.095	-.012	-.146	-.133	.106	-.184	-.022	.047	.083	.115	-.022	-.075	-.024	1.0															
17	.005	-.027	.172	.119	.007	.048	.071	.091	-.005	.001	-.050	.088	.120	-.104	-.279*	-.227*	1.0														
18	.119	-.023	-.009	.143	.151	-.108	.256*	-.027	-.217	.253*	-.037	-.009	-.217	-.199	-.123	-.252*	-.013	1.0													
19	-.133	-.040	.339*	-.018	.109	.076	-.098	.067	.005	-.094	-.035	.035	.005	-.229*	-.267*	.037	.067	-.126	1.0												
20	.107	-.108	-.140	.220*	.126	-.055	.027	.049	.165	.019	.038	-.115	-.048	-.007	-.046	.019	-.064	.252*	.122	1.0											
21	-.074	-.153	.140	-.008	-.048	-.036	-.093	.124	.074	-.128	.018	-.169	-.031	.316**	.323**	.106	.071	.311**	.052	-.178	1.0										
22	.046	-.015	.277*	.061	-.104	-.233*	.130	.051	-.046	-.061	.019	-.156	-.142	.210	.294**	-.144	.058	-.021	-.037	-.157	.352**	1.0									
23	.015	.045	-.120	.215	.171	-.160	.242*	.058	-.211	.182	-.025	-.109	-.113	-.127	-.109	-.047	.135	.494**	-.046	.366**	-.101	-.200	1.0								
24	.119	-.118	.017	-.001	.094	-.034	.193	-.212	.165	-.064	-.009	-.053	.070	.206	.114	.019	-.040	-.220*	.131	-.051	.357**	.224*	-.091	1.0							
25	.007	-.043	-.035	.068	-.169	-.033	.055	-.122	-.007	.055	-.012	.198	-.007	.111	-.035	.683**	-.058	-.181	.248*	-.004	.055	-.013	-.164	.041	1.0						
26	.013	-.014	-.046	-.071	.424**	.242*	-.264*	-.017	.229*	-.042	.018	-.005	.108	.217	-.148	-.157	-.050	-.234*	.138	-.120	.159	.019	-.223*	.310**	-.146	1.0					
27	-.048	-.121	-.076	-.031	.155	.199	-.252*	.060	.263*	-.205	.081	-.108	.155	.076	.019	-.081	.028	-.220*	.202	-.030	.373**	.104	-.030	.147	-.015	.516**	1.0				
28	.007	.036	-.139	.002	.102	.052	-.197	.057	.193	-.053	.168	-.115	.126	.263*	.023	-.167	.034	-.129	.084	.050	.017	.076	-.058	.077	-.019	.100	.244*	1.0			
29	.069	.188	-.010	.147	.045	-.082	.037	.108	-.037	.055	.027	-.027	-.037	.157	.050	.037	.085	-.278*	.030	.057	.132	.221*	-.037	.072	.063	.205	.278*	.394**	1.0		
30	.084	-.089	.092	.208	.070	-.143	.333**	-.004	-.178	.153	.177	-.144	-.084	-.080	.134	.018	.082	.080	.117	.206	.059	.119	.157	-.059	.079	-.078	-.006	.062	.203	1.0	
31	-.003	-.080	-.074	-.090	-.034	.078	-.145	.117	.098	.017	.038	.063	.003	.114	.119	.006	-.125	-.093	-.096	-.024	.129	-.061	.035	.013	-.199	.165	.035	-.008	-.047	-.112	1.0

NOTE: \* < p .05; \*\* < p .01; \*\*\* < p .001, two-tailed tests.

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
32	.112	-.180	-.002	-.126	-.163	.088	-.150	.016	.163	-.080	-.003	.082	.163	.036	.001	-.106	-.181	.144	-.075	-.007	.010	-.028	.005	.074	-.061	-.096	-.070	-.036	-.169	-.166	.257*
33	-.081	.115	-.015	.029	.081	-.060	-.001	.152	-.087	.046	.080	-.089	-.087	.117	.109	-.153	.092	-.145	-.134	-.016	-.099	-.095	.045	.106	-.224*	.080	-.082	.023	.103	-.121	.048
34	.030	.009	.012	.022	-.130	.015	-.213	.094	-.030	-.038	.066	-.042	-.030	-.030	.162	-.027	-.075	-.270*	-.143	-.075	.123	.008	-.195	.229*	-.036	-.012	.041	.094	.067	-.193	.158
35	.112	.039	-.032	-.098	-.205	-.012	.090	-.059	.025	-.005	-.096	.163	.163	-.041	.001	-.106	.009	.144	-.173	-.232*	-.150	.045	-.071	-.143	.015	-.096	-.070	-.215	-.219*	-.021	.319**
36	.055	.074	.125	-.140	-.142	.209	-.021	-.115	.194	-.126	-.093	.027	.194	.005	.174	-.097	-.090	-.015	-.086	-.196	-.021	.167	-.146	-.214	.132	-.093	.033	-.005	.066	-.058	-.063
37	-.037	.141	-.068	.089	-.013	.017	-.013	-.168	.037	-.033	-.179	-.060	.037	-.097	-.145	.191	-.072	.023	.040	.014	-.013	.015	-.045	.118	.122	.014	.035	-.116	-.057	.362**	.371**
38	.460**	-.037	-.139	.053	-.097	-.158	.178	-.068	-.080	.113	.229*	-.067	-.080	-.194	-.067	.096	.120	-.022	.005	-.048	-.031	.050	-.113	-.119	.092	-.135	-.060	-.141	-.004	.105	-.185
39	.106	-.087	.028	.205	.074	.017	.153	-.013	-.106	.124	.014	.024	-.106	-.097	.024	.097	.027	-.055	-.062	-.032	.070	-.061	.189	.118	.043	.208	.121	.070	.231*	.239*	.230*
40	.140	-.002	-.016	-.036	-.110	.169	-.031	-.184	.215	-.147	.003	.046	.215	.057	-.024	.299**	-.145	-.124	.037	-.058	.037	.045	-.047	.081	.291**	.003	.131	.229*	.167	.080	-.056
41	.126	-.109	.230*	.122	.048	-.054	-.067	.062	.063	-.046	.171	.043	-.032	-.024	.155	-.180	.080	.171	.286**	.058	-.012	-.006	.046	-.172	-.081	-.149	-.038	.147	-.110	.017	-.061
42	-.039	-.277*	.068	.085	-.155	.020	.077	.024	-.067	.109	.209	.002	-.067	-.123	.189	-.024	-.206	-.009	-.040	.127	.200	-.043	.007	.058	-.094	-.077	.019	-.075	.050	.134	.285**
43	.055	-.125	.014	.112	.008	.118	.123	-.115	-.055	.010	.075	.027	-.055	-.135	.174	.067	-.090	-.015	-.086	.130	.123	.034	.263*	.180	-.005	-.093	.033	-.005	.203	.204	.068
44	.032	.298*	.103	.208	.177	.067	.070	-.142	-.032	-.150	-.053	.183	-.032	-.077	-.068	.225*	-.051	-.086	-.049	.074	.070	-.131	.150	.103	.154	-.053	-.066	-.003	.116	.116	-.110
45	-.037	.315*	-.132	-.027	-.013	-.088	-.097	-.013	.037	-.033	.014	-.060	.037	-.017	.108	-.092	.126	.023	.040	.014	.070	.167	-.124	-.033	.043	.014	.292**	.017	-.083	.089	-.221*
46	.135	-.208	-.046	-.194	-.053	.110	.193	.179	-.013	-.241*	.227*	-.077	.013	.217	.138	-.077	.034	-.037	-.035	-.001	.159	.083	.042	.118	-.012	.018	.153	.010	-.173	-.078	.038
47	.045	.060	-.123	.050	-.116	-.015	-.076	.125	-.045	-.213	-.076	.082	-.045	.231*	-.097	-.079	-.073	.043	-.070	.006	.100	.135	-.119	-.014	-.116	.129	.269*	.109	.165	-.153	-.157
48	.106	.141	-.068	-.056	.074	.121	-.013	-.091	.037	-.033	-.179	.108	.180	-.178	.229*	.002	.126	.023	.245*	.014	-.180	-.061	.033	.118	.122	.014	-.051	-.090	-.005	-.061	.371**
49	.056	.024	.064	-.034	-.116	-.134	-.059	.072	-.056	-.232*	.033	.140	.039	.041	-.028	-.057	.194	.002	-.110	-.106	-.003	.237*	-.080	-.001	-.058	-.095	-.061	-.182	-.037	.007	-.263*
50	.050	.015	.020	.055	-.041	-.219*	-.019	.309**	.241*	-.095	-.019	.099	-.145	-.049	-.126	-.108	.207	-.083	-.031	.064	-.019	.217	-.009	.027	-.092	-.019	-.104	.102	.129	.082	-.140
51	-.040	.206	.311*	-.161	.072	.167	-.150	.011	.179	.000	.283*	.024	.119	-.079	.071	.158	-.152	-.162	.356**	-.072	-.035	-.212	-.207	.157	.121	.215	.131	.122	-.015	-.104	.094
52	.130	.178	-.116	.037	.020	-.033	.048	.045	-.035	-.050	.057	.085	-.111	.091	-.150	-.132	.098	.247*	.087	.189	-.107	-.030	.258*	-.081	.019	-.136	-.073	.119	.013	.028	-.089
53	-.047	.122	.192	-.139	-.082	.053	-.127	-.118	.193	-.245*	.097	.158	.138	.243*	.051	.002	-.030	-.181	-.125	-.114	.117	.215	-.135	.446**	.023	.023	.059	.223*	.157	-.190	.063
54	.028	-.234*	.292**	.083	-.077	-.147	.129	.084	-.186	-.098	.055	.047	-.068	.012	.051	-.149	.031	.088	-.100	-.054	-.023	.411**	-.102	-.020	-.058	-.146	-.213	.029	.045	.019	-.065
55	-.015	.056	.021	-.118	-.081	-.039	-.099	-.121	.175	-.224*	-.006	.297**	.175	-.124	-.136	.090	.091	-.080	.035	.021	-.137	.005	-.055	.127	.286**	.222*	-.092	.052	.037	-.023	.131
56	.094	-.044	.133	-.033	-.125	.144	.286*	-.035	.087	-.156	.025	.161	-.003	.047	.002	-.130	-.078	.015	-.027	.069	.266*	.230*	-.116	.110	.025	.071	.169	-.084	.248*	-.035	.016
57	-.150	-.159	.033	.114	-.055	-.150	.095	-.192	.117	.111	-.119	-.021	-.145	-.186	-.046	.337**	-.165	-.234*	.022	-.044	-.032	.098	-.184	.026	.296**	.142	.052	-.276*	.005	.005	.008
58	.082	.210	-.088	-.079	-.124	.009	-.138	.113	.048	-.234*	.083	.328**	-.004	.053	.005	-.077	-.032	-.093	.036	.075	-.089	.093	.078	.040	.064	-.075	.056	.192	.205	-.125	-.039
59	-.006	-.204	.005	.170	.018	-.192	.149	-.152	-.170	.120	-.185	-.010	-.157	-.224*	.229*	.038	-.085	.156	-.009	.005	-.241*	.044	-.010	-.092	.020	.070	-.002	-.159	-.038	.017	-.076
60	.049	.038	-.002	-.027	-.032	-.057	-.009	-.016	.096	-.089	.085	.030	.065	.065	-.037	-.173	.091	.154	.045	.090	.045	.069	.101	.196	-.016	-.125	-.078	.160	.150	-.032	-.132

NOTE: \* < p .05; \*\* < p .01; \*\*\* < p .001, two-tailed tests.

Variables	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
32	1.0																												
33	-.122	1.0																											
34	.150	.165	1.0																										
35	.158	.006	.061	1.0																									
36	-.078	-.060	-.101	.304**	1.0																								
37	-.149	-.115	-.193	-.149	-.074	1.0																							
38	.025	-.087	-.030	.301**	-.055	.037	1.0																						
39	-.039	.285**	.175	-.039	-.074	-.141	-.106	1.0																					
40	-.016	-.042	.125	.075	.231*	-.092	-.140	.097	1.0																				
41	.137	.098	-.027	.137	.175	-.193	.063	-.117	-.118	1.0																			
42	.244*	-.089	.162	-.161	-.120	-.229*	-.067	.024	-.094	.099	1.0																		
43	-.078	.172	.059	-.078	-.038	-.074	-.055	.523**	.231*	.044	.321**	1.0																	
44	-.044	-.034	-.058	-.044	-.022	-.042	-.032	.298**	.225*	.100	.183	.570**	1.0																
45	-.039	-.115	-.009	.399**	.125	-.141	.324**	-.027	.002	.034	-.145	-.074	-.042	1.0															
46	.182	.080	.145	.089	.075	-.179	-.135	.111	.083	-.021	-.220*	-.093	-.053	.304**	1.0														
47	-.063	-.049	.113	.169	-.031	.182	-.045	-.060	.121	-.018	-.097	-.031	-.018	.182	.129	1.0													
48	-.149	-.115	-.193	-.039	-.074	.544**	-.106	-.141	-.186	.420**	-.229*	-.074	-.042	-.141	-.179	-.060	1.0												
49	.018	-.180	-.021	.236*	-.039	.127	.229*	-.024	-.057	.128	-.196	-.171	-.098	.127	.033	.182	-.100	1.0											
50	-.045	.184	.115	.174	-.034	-.167	.046	-.015	-.045	.106	-.069	-.167	-.095	.137	.110	.026	-.091	.167	1.0										
51	.030	.037	.090	-.122	-.083	.016	.000	.016	.039	-.094	.141	.000	-.047	-.222*	-.134	-.135	.080	-.264*	-.212	1.0									
52	-.054	-.103	-.068	-.010	.029	-.056	-.073	.065	.115	-.007	-.218	.055	.046	-.056	.095	.034	-.026	-.030	-.074	-.015	1.0								
53	-.072	.150	.181	.040	-.031	-.035	-.008	.096	.134	.016	-.100	.121	.055	-.035	-.001	.170	-.122	.136	.056	-.063	.355**	1.0							
54	.024	-.067	.067	.078	.181	-.103	-.075	-.047	.040	.058	.010	.018	.103	.047	-.051	.147	-.065	.275*	.398**	.398**	-.116	.104	1.0						
55	.009	-.028	.141	.083	.122	-.031	.079	.071	.153	-.066	-.212	.033	.044	.020	.037	-.045	.122	.039	.097	-.163	.505**	.526**	.032	1.0					
56	.191	-.116	.100	.087	.154	-.064	.064	.062	-.041	-.025	.068	.154	.088	.133	.010	.201	-.046	.041	-.074	-.186	.168	.249*	.172	.289**	1.0				
57	-.059	-.019	.029	.016	-.037	.142	.080	-.038	.031	-.257*	.000	-.106	-.038	.074	-.105	-.018	.119	.020	.119	-.187	.486**	-.217	.217	-.088	.077	1.0			
58	.003	.124	.130	.123	-.025	-.106	-.037	.055	.021	.209	.101	.119	.125	-.038	.052	.089	-.142	.080	.115	.037	.387**	.399**	-.145	.223*	.083	.298**	1.0		
59	.000	-.100	-.222*	-.009	-.071	.224*	-.002	-.123	-.062	-.037	-.029	-.182	-.100	.064	-.083	.041	.144	.153	.240*	.318**	.391**	.300**	.316**	-.207	-.127	.703**	-.232*	1.0	
60	.111	-.021	.175	.071	.023	-.079	.075	.062	.128	.041	-.111	.096	.038	-.005	.127	.107	-.079	-.005	-.113	-.002	.717**	.505**	-.028	.530**	.322**	.529**	.370**	.545**	1.0